



**MAHSO**  
MARKET AREA HEALTH SYSTEMS OPTIMIZATION

# **VISN 10 Eastern Michigan Market Data Discovery & Findings**

Submission to VISN Leadership  
October 4, 2019



## VISN 10: Eastern Michigan Market

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## Overview



## VISN 10: Eastern Michigan Market

**Overview** ► **Document Purpose**

The Data Discovery & Findings (DD&F) deck is a standardized collection of data that will be used across market assessments to understand important aspects of each market. It is similar to the deck that was presented during previous VHA Office of Policy and Planning (OPP) market assessment trainings and will be used to develop key findings and inform the development of opportunities to create high-performing networks of care.

Data is pulled from a wide range of VA and commercial sources, and each slide cites the relevant data source.

The DD&F is one piece of the overall market assessment process. The assessments will also be informed by review of local data and site visits to ensure that both qualitative and quantitative data are considered. No single data point will be used as the deciding factor in determining opportunities for the market.



## VISN 10: Eastern Michigan Market

**Overview** ► **Assumptions**• **VA Data & Analysis**

- ✓ All VA data was extracted and provided by VA for use in the DD&F.
- ✓ When there were discrepancies between data obtained from local sources and data obtained from national sources, national sources were used.
- ✓ In various places throughout the deck, there are mappings to translate data between different data types (e.g., HSPC, bed sections, stop codes, specialty, services lines, CPTs, DRGs, etc.). These mappings were provided by the Office of Policy & Planning (OPP) and implemented to aggregate or categorize data for display in the slides. It also allows for a better programmatic view of care.
- ✓ Treating facilities that have a parent in a different market are displayed in both the treating facility market and the parent market.
- ✓ Enrollee Health Care Projection Model (EHCPM) citations include a combination of market-based and facility-based projections. These two projection model views are different, and the numbers are not intended to match.
- ✓ EHCPM data for the year 2017 is pulled from the “Actuals” databases instead of the projected year 2017.
- ✓ The facilities contained within the DD&F are based on the Facility Hierarchy file provided by OPP. Any data for facilities not in this file are not included in the DD&F. Additionally, the facility market, county, parent, and name are found within this file.
- ✓ The market hierarchy geography used to create the DD&F is from the BY17 EHCPM. All VISN/Market/County mappings are based off of this geography.
- ✓ Numeric values of data throughout the DD&F are rounded.
- ✓ Office of Community Care data was obtained using the Program Integrity Tool. This data may have anomalies, gaps, and missing values due to various methods of processing Choice data within the last several years. Any identified gaps were addressed with reasonable logic wherever possible; however, errors may remain.
- ✓ For maps, any site of care deactivated in VAST after July 18, 2019 will not be reflected.
- ✓ For workload trending purposes, slides may contain facilities that are deactivated, if they had workload in FY16, FY17 or FY18.
- ✓ Planned sites of care are not included on maps unless specifically requested and justified.



## VISN 10: Eastern Michigan Market

**Overview** ► **Assumptions, cont.****• Commercial Market Data & Analysis**

✓ The commercial market capacity assessment considers only reported physical capacity and does not incorporate: 1) ability to staff patient care services or accept VA patients; 2) length of time to change facilities to accommodate Veteran demand; and 3) any negotiations for specific rates for care provided in the community.

✓ Pediatric healthcare was not considered.

✓ IBM Market Expert FTE estimated demand is based on a median provider productivity level by service line.

✓ The 10 year commercial workload estimates are based on the 10 year IBM/Watson Health Market Expert projections straight-lined through 2028.

✓ Community hospitals within a 60 minute drive time of the VAMC's zip code were the primary focus for assessment and used as a comparison to each VAMC.

✓ Due to differences in hospitals' cost reporting periods, FY18 CMS Cost Report data was used when available and FY17 CMS Cost Report data was used when FY18 data was not available.

**• Quality**

✓ Differences in quality metrics between VA and widely accepted commercial benchmarks introduce significant subjectivity.

**• Cost Analysis and Recommendations**

✓ This is a high-level cost analysis. It compares three data points: internal VA cost to provide care to Veterans, potential cost to acquire the same care in the market at Medicare rates, and existing experience with purchase of Non-VA care as applicable.

✓ Adjusted total cost by DRG as well as non-VA purchased care paid by DRG was provided by VA.



## Demographics ► **Market Geography and Demographics**



## VISN 10: Eastern Michigan Market

## Demographics ► Existing VA Market and Facility Hierarchy

MARKET CODE	MARKET NAME	2017 MARKET ENROLLEE POPULATION	SUBMARKET CODE	SUBMARKET NAME	2017 SUBMARKET ENROLLEE POPULATION	MEDICAL CENTER NAME	SECTOR CODE	SECTOR ENROLLEE 2017 POP	PROJECTED SECTOR ENROLLEE 2027 POP	SECTOR CHANGE RATE 2017-2027	EXISTING FACILITY NAME	EXISTING FACILITY TYPE
10-j	(V10) Eastern Michigan	112,551	10-j-2	V10 East Mich Southeast	87,944	(V10) (506) Ann Arbor	10-j-2-A	12,691	13,547	6.7%	(V10) (506GB) Flint	Primary Care CBOC
						(V10) (553) Detroit	10-j-2-B	6,073	5,805	-4.4%	(V10) (553GA) Yale	Primary Care CBOC
							10-j-2-C	18,090	17,144	-5.2%	(V10) (553GB) Pontiac	Multi-Specialty CBOC
							10-j-2-D	15,663	16,045	2.4%		
							10-j-2-E	35,427	31,374	-11.4%	(V10) (553) Detroit	VA Medical Center (VAMC)
						(V10) (553BU) Detroit Domiciliary	Residential Care Site (MH RRTP/DRRTP) (Stand-Alone)					
			(V10) (553QA) Piquette Street	Primary Care CBOC								
			10-j-1	V10 East Mich Northeast	24,607	(V10) (655) Saginaw	10-j-1-A	4,319	4,074	-5.7%	(V10) (655GC) Oscoda	Primary Care CBOC
										(V10) (655GD) Alpena	Multi-Specialty CBOC	
							10-j-1-B	4,853	4,771	-1.7	(V10) (655GE) Clare	Multi-Specialty CBOC
							10-j-1-C	6,977	6,907	-1.0%		
							10-j-1-D	8,458	8,050	-4.8%	(V10) (655) Saginaw	VA Medical Center (VAMC)
(V10) (655GF) Bad Axe	Primary Care CBOC											
(V10) (655QA) Saginaw-Barnard Road	Other Outpatient Services (OOS)											
10-i	(V10) MichErie	108,204	10-i-1	V10 ME Northwest	14,953		10-i-1-A	4,212	4,293	1.9%	(V10) (655GA) Gaylord	Multi-Specialty CBOC
										(V10) (655GH) Cheboygan County	Primary Care CBOC	
										(V10) (655GI) Grayling	Primary Care CBOC	
							10-i-1-B	5,957	6,096	2.3%	(V10) (655GB) Traverse City	Primary Care CBOC
										(V10) (655QB) Grand Traverse	Other Outpatient Services (OOS)	
						10-i-1-C	4,784	5,013	4.8%	(V10) (655GG) Cadillac	Multi-Specialty CBOC	

Source: 1. BY17 EHCPM 2. FY18Q4 VAST

Note: Mobile sites are not listed

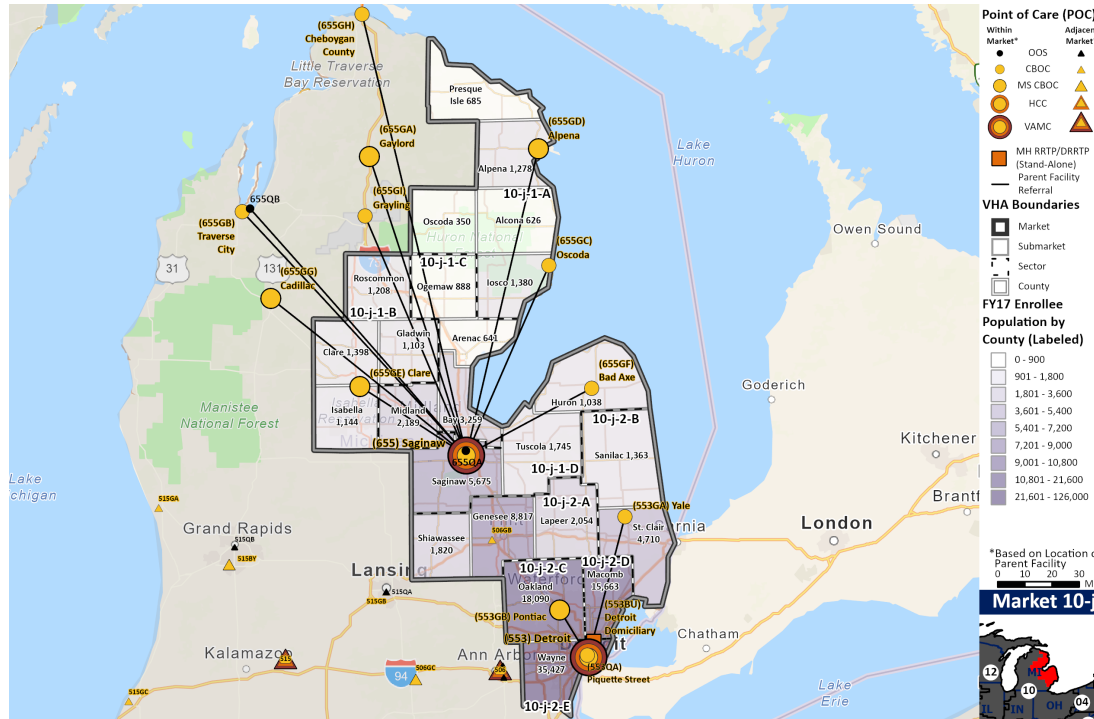
1.1.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Demographics ▶ Market Overview

## Existing VHA System



## Key Market Statistics

**Total 2017 Enrollee Population: 112,552**

• Top Counties by Enrollee Population:

- Wayne, MI: 35,427
- Oakland, MI: 18,090
- Macomb, MI: 15,663

• Total Enrollees: 34th of 96 markets

- Estimated 10-Year Enrollee Change: -4.3%
  - 60th of 96 markets

**Total 2017 Eligible Veteran Population: 203,642**

- -28.9% estimated 10-Year Eligible Veteran Population Change

**2018 Core Uniques:\* 75,618**

**VAMC:**

- (V10) (553) Detroit-Michigan
- (V10) (655) Saginaw-Michigan

\*Core uniques excludes uniques who have only used telephone triage, pharmacy, and lab.



## VISN 10: Eastern Michigan Market

## Demographics ► Market Enrollee Demographics

County-Based Enrollee Projections						
County	Sector	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
Iosco, MI	10-j-1-A	1,380	1,296	-6.09%	1,035	-24.96%
Alpena, MI	10-j-1-A	1,278	1,163	-8.94%	944	-26.14%
Presque Isle, MI	10-j-1-A	685	674	-1.59%	544	-20.64%
Alcona, MI	10-j-1-A	626	620	-0.91%	480	-23.28%
Oscoda, MI	10-j-1-A	350	321	-8.26%	261	-25.38%
<b>Sector Subtotal</b>	<b>10-j-1-A</b>	<b>4,319</b>	<b>4,075</b>	<b>-5.65%</b>	<b>3,264</b>	<b>-24.42%</b>
Clare, MI	10-j-1-B	1,398	1,357	-2.92%	1,128	-19.34%
Roscommon, MI	10-j-1-B	1,208	1,210	0.10%	968	-19.87%
Gladwin, MI	10-j-1-B	1,103	1,105	0.21%	915	-17.00%
Isabella, MI	10-j-1-B	1,144	1,099	-3.89%	907	-20.70%
<b>Sector Subtotal</b>	<b>10-j-1-B</b>	<b>4,853</b>	<b>4,771</b>	<b>-1.69%</b>	<b>3,918</b>	<b>-19.26%</b>
Bay, MI	10-j-1-C	3,259	3,162	-2.97%	2,682	-17.70%
Midland, MI	10-j-1-C	2,189	2,225	1.64%	1,923	-12.16%
Ogemaw, MI	10-j-1-C	888	873	-1.78%	745	-16.16%
Arenac, MI	10-j-1-C	641	647	0.82%	547	-14.65%
<b>Sector Subtotal</b>	<b>10-j-1-C</b>	<b>6,978</b>	<b>6,906</b>	<b>-1.03%</b>	<b>5,897</b>	<b>-15.49%</b>
Saginaw, MI	10-j-1-D	5,675	5,367	-5.42%	4,418	-22.16%
Tuscola, MI	10-j-1-D	1,745	1,660	-4.88%	1,345	-22.92%
Huron, MI	10-j-1-D	1,038	1,023	-1.49%	825	-20.55%
<b>Sector Subtotal</b>	<b>10-j-1-D</b>	<b>8,458</b>	<b>8,050</b>	<b>-4.83%</b>	<b>6,587</b>	<b>-22.12%</b>

Note: Market totals do not exactly match following slides due to rounding by county within EHCPM.

Source: BY17 EHCPM VetPop & Enrollment

1.3.V10.EasternMichigan





## VISN 10: Eastern Michigan Market

## Demographics ► Market Enrollee Demographics, cont.

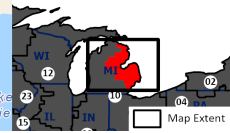
County-Based Enrollee Projections						
County	Sector	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
Genesee, MI	10-j-2-A	8,817	9,228	4.66%	8,131	-7.78%
Lapeer, MI	10-j-2-A	2,054	2,289	11.44%	1,953	-4.91%
Shiawassee, MI	10-j-2-A	1,820	2,030	11.54%	1,749	-3.93%
<b>Sector Subtotal</b>	<b>10-j-2-A</b>	<b>12,691</b>	<b>13,547</b>	<b>6.74%</b>	<b>11,832</b>	<b>-6.77%</b>
Saint Clair, MI	10-j-2-B	4,710	4,539	-3.62%	3,773	-19.90%
Sanilac, MI	10-j-2-B	1,363	1,266	-7.13%	1,039	-23.79%
<b>Sector Subtotal</b>	<b>10-j-2-B</b>	<b>6,073</b>	<b>5,805</b>	<b>-4.41%</b>	<b>4,812</b>	<b>-20.77%</b>
Oakland, MI	10-j-2-C	18,090	17,144	-5.23%	14,051	-22.33%
<b>Sector Subtotal</b>	<b>10-j-2-C</b>	<b>18,090</b>	<b>17,144</b>	<b>-5.23%</b>	<b>14,051</b>	<b>-22.33%</b>
Macomb, MI	10-j-2-D	15,663	16,045	2.44%	13,838	-11.65%
<b>Sector Subtotal</b>	<b>10-j-2-D</b>	<b>15,663</b>	<b>16,045</b>	<b>2.44%</b>	<b>13,838</b>	<b>-11.65%</b>
Wayne, MI	10-j-2-E	35,427	31,374	-11.44%	25,103	-29.14%
<b>Sector Subtotal</b>	<b>10-j-2-E</b>	<b>35,427</b>	<b>31,374</b>	<b>-11.44%</b>	<b>25,103</b>	<b>-29.14%</b>
<b>Market Total</b>	<b>10-j</b>	<b>112,552</b>	<b>107,717</b>	<b>-4.30%</b>	<b>89,303</b>	<b>-20.66%</b>

Note: Market totals do not exactly match following slides due to rounding by county within EHCPM.

Source: BY17 EHCPM VetPop & Enrollment

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## Demographics



### 1.5.V10.EasternMichigan

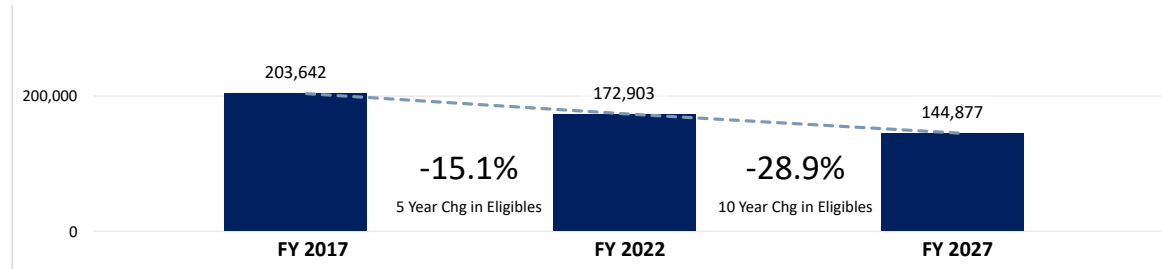


## VISN 10: Eastern Michigan Market

## Demographics ► Market Enrollee and Eligible Demographics

Market-Based Enrollee and Eligible Projections						
Geography	Measure	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
VISN	EOY Enrollees	668,504	662,656	-0.9%	578,845	-13.4%
Market	EOY Enrollees	112,552	107,717	-4.3%	89,303	-20.7%
National	EOY Enrollees	8,753,704	8,896,391	1.6%	8,262,997	-5.6%
VISN	Eligible Veterans	1,135,601	884,968	-22.1%	680,940	-40.0%
Market	Eligible Veterans	203,642	144,877	-28.9%	101,642	-50.1%
National	Eligible Veterans	14,271,277	12,265,488	-14.1%	10,448,365	-26.8%

Estimated Eligible Veterans by Year





## VISN 10: Eastern Michigan Market

## Demographics ► Market Enrollee and Eligible Demographics, cont.

Sector-Based Enrollee and Eligible Projections						
Sector	Measure	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
10-j-1-A	EOY Enrollees	4,319	4,075	-5.6%	3,264	-24.4%
10-j-1-B	EOY Enrollees	4,853	4,771	-1.7%	3,918	-19.3%
10-j-1-C	EOY Enrollees	6,978	6,906	-1.0%	5,897	-15.5%
10-j-1-D	EOY Enrollees	8,458	8,050	-4.8%	6,587	-22.1%
10-j-2-A	EOY Enrollees	12,691	13,547	6.7%	11,832	-6.8%
10-j-2-B	EOY Enrollees	6,073	5,805	-4.4%	4,812	-20.8%
10-j-2-C	EOY Enrollees	18,090	17,144	-5.2%	14,051	-22.3%
10-j-2-D	EOY Enrollees	15,663	16,045	2.4%	13,838	-11.6%
10-j-2-E	EOY Enrollees	35,427	31,374	-11.4%	25,103	-29.1%
10-j-1-A	EOY Eligibles	7,176	5,610	-21.8%	4,010	-44.1%
10-j-1-B	EOY Eligibles	8,199	6,846	-16.5%	5,150	-37.2%
10-j-1-C	EOY Eligibles	11,555	9,512	-17.7%	7,470	-35.3%
10-j-1-D	EOY Eligibles	14,226	10,618	-25.4%	7,431	-47.8%
10-j-2-A	EOY Eligibles	23,966	18,873	-21.2%	14,054	-41.4%
10-j-2-B	EOY Eligibles	10,964	8,209	-25.1%	5,926	-46.0%
10-j-2-C	EOY Eligibles	33,895	22,736	-32.9%	15,533	-54.2%
10-j-2-D	EOY Eligibles	31,002	22,453	-27.6%	16,263	-47.5%
10-j-2-E	EOY Eligibles	62,658	40,020	-36.1%	25,806	-58.8%



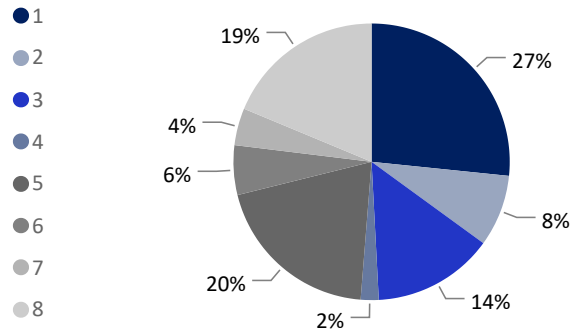
## VISN 10: Eastern Michigan Market

## Demographics ► Market Enrollee Priority Groups

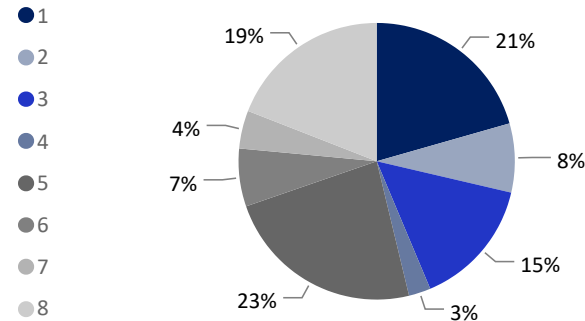
2017-2027 Market Enrollee Breakdown by Priority

Priority	Enrollees 2017	% Enrollees 2017	Enrollees 2027	% Enrollees 2027	10 Year % Change
1	25,500	22.7%	36,765	34.1%	44.2%
2	9,349	8.3%	8,740	8.1%	-6.5%
3	17,413	15.5%	15,171	14.1%	-12.9%
4	3,066	2.7%	2,417	2.2%	-21.2%
5	27,361	24.3%	19,339	18.0%	-29.3%
6	6,228	5.5%	5,033	4.7%	-19.2%
7	5,182	4.6%	6,937	6.4%	33.9%
8	18,453	16.4%	13,315	12.4%	-27.8%
Grand Total	112,552	100.0%	107,717	100.0%	-4.3%

National



VISN 10



Source: BY17 EHCPM VetPop &amp; Enrollment

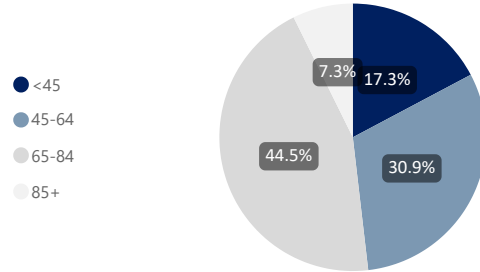
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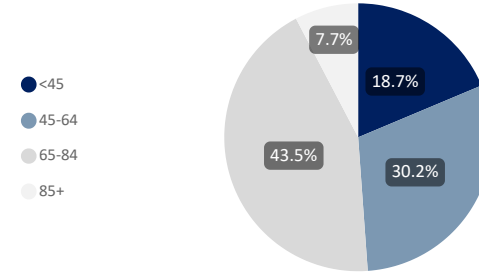
## VISN 10: Eastern Michigan Market

## Demographics ► Market Enrollee Population — Age and Gender

2017 Eastern Michigan Market Age Breakdown

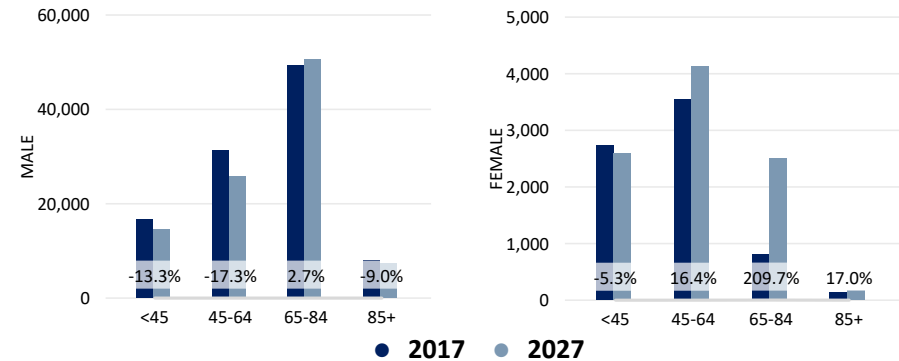


2017 VISN 10 Age Breakdown



Female Enrollee Population		
2017	2027	10 Year % Change
7,246	9,403	29.8%

Market Enrollees and Growth Rates by Age Group





## VISN 10: Eastern Michigan Market

## Demographics ► Market Reliance

	VA Facility Care	National VA Facility Care	VA Facility Variance from National	Community Care	National Community Care	Community Care Variance from National	Total Reliance	National Total Reliance	Total Reliance Variance from National
OP MED	26.4%	27.5%	-1.1%	3.9%	6.1%	-2.3%	30.3%	33.7%	-3.4%
PATHOLOGY	39.2%	46.3%	-7.1%	1.4%	2.6%	-1.2%	40.6%	48.9%	-8.3%
DIALYSIS	11.7%	7.4%	4.3%	16.1%	33.4%	-17.3%	27.8%	40.8%	-13.0%
OP SURG	20.0%	23.3%	-3.3%	3.7%	5.1%	-1.4%	23.7%	28.4%	-4.8%
AUDIOLOGY	57.4%	56.7%	0.7%	3.4%	2.8%	0.7%	60.8%	59.5%	1.3%
IP MED	14.9%	18.5%	-3.6%	4.5%	5.5%	-1.0%	19.4%	24.0%	-4.6%
IP SURG	10.6%	13.6%	-3.0%	5.9%	7.8%	-1.9%	16.5%	21.4%	-4.9%
IP MH	44.5%	42.7%	1.8%	3.0%	9.5%	-6.5%	47.5%	52.2%	-4.7%
OP MH	68.0%	81.1%	-13.1%	0.5%	3.0%	-2.5%	68.6%	84.2%	-15.6%
PROSTHETICS	38.2%	47.6%	-9.3%	0.0%	0.0%	0.0%	38.2%	47.6%	-9.3%
TOTAL	22.5%	25.1%	-2.7%	4.4%	6.7%	-2.3%	26.9%	31.8%	-5.0%

**Projections from the VA Enrollee Health Care Projection Model (EHCPM) account for new enrollment based on demographic changes**

- Projections therefore account for a different pool of enrollees in the future as the enrollment population changes
- Some Veterans who are currently ineligible and unenrolled may become enrollees in the future

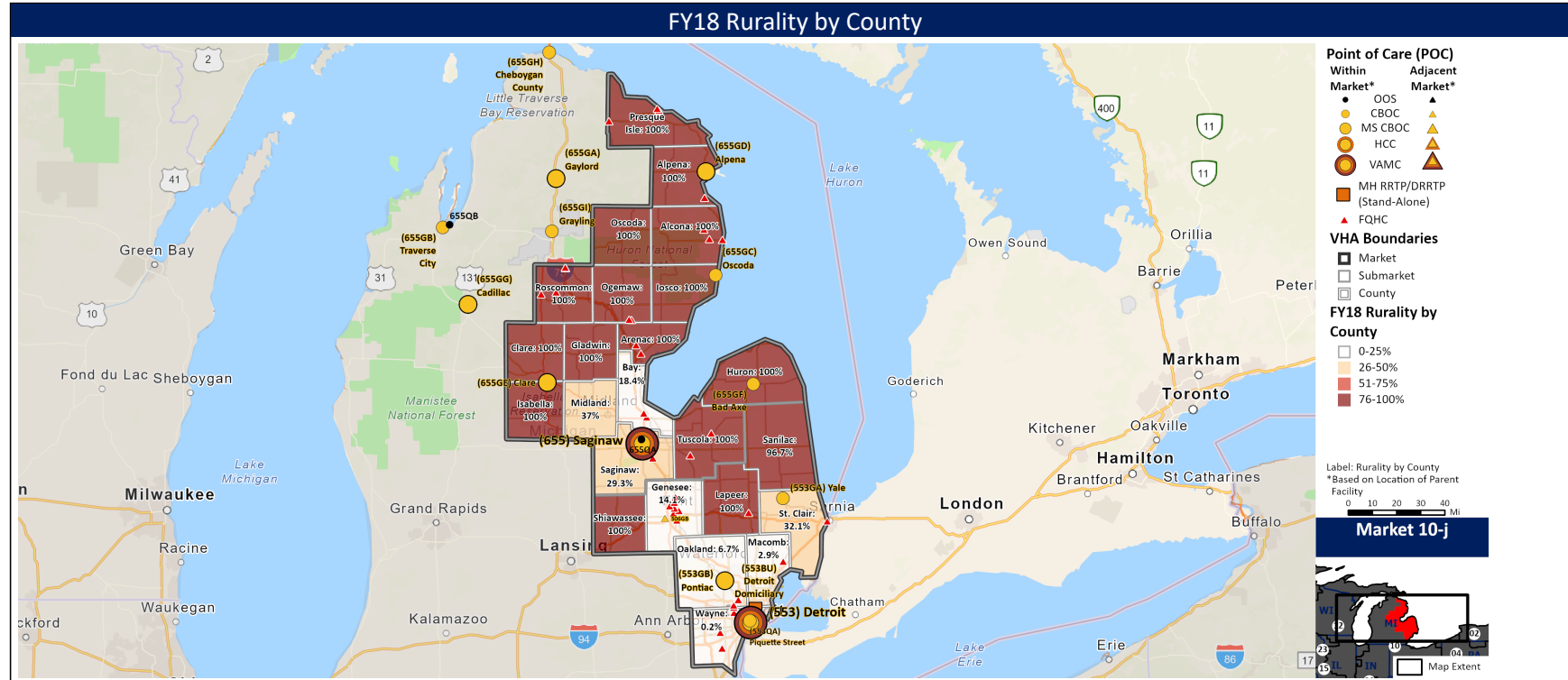
**Potential use of health care in VA is projected for those Veterans who are assumed to be eligible and enrolled at a given point**

- The EHCPM projects utilization of health care services rather than projecting patient/user counts
  - Some patients may use few services and some patients may use many, so projecting by utilization of health services provides a better picture of the amount of health care VA will need to provide
- Modeled projections accounts for the amount of care enrollees are expected to receive through VA rather than from their other sources of health care



## VISN 10: Eastern Michigan Market

## Demographics ► Market Current Enrollment Rurality – FY18



\* Includes Rural and Highly Rural Locations

Source: Geocoded Enrollee File FY18Q4

1.14.V10.EasternMichigan#IMG





## VISN 10: Eastern Michigan Market

## Demographics ► Market Current Enrollment Rurality — FY18, cont.

County	Urban Enrollees	Rural Enrollees*	% Rural	Total Enrollees
Alcona, MI	0	598	100.0%	598
Alpena, MI	0	1,266	100.0%	1,266
Arenac, MI	0	541	100.0%	541
Bay, MI	2,663	602	18.4%	3,265
Clare, MI	0	1,277	100.0%	1,277
Genesee, MI	7,230	1,188	14.1%	8,418
Gladwin, MI	0	1,044	100.0%	1,044
Huron, MI	0	1,040	100.0%	1,040
Iosco, MI	0	1,352	100.0%	1,352
Isabella, MI	0	1,310	100.0%	1,310
Lapeer, MI	0	2,193	100.0%	2,193
Macomb, MI	15,010	456	2.9%	15,466
Midland, MI	1,475	865	37.0%	2,340
Oakland, MI	16,546	1,181	6.7%	17,727
Ogemaw, MI	0	926	100.0%	926
Oscoda, MI	0	418	100.0%	418
Presque Isle, MI	0	646	100.0%	646
Roscommon, MI	0	1,076	100.0%	1,076
Saginaw, MI	4,057	1,679	29.3%	5,736
Saint Clair, MI	3,126	1,479	32.1%	4,605

\* Includes Rural and Highly Rural Locations.

Source: Geocoded Enrollee File FY18Q4

1.13.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Demographics ► Market Current Enrollment Rurality — FY18, cont.

County	Urban Enrollees	Rural Enrollees*	% Rural	Total Enrollees
Sanilac, MI	42	1,228	96.7%	1,270
Shiawassee, MI	0	1,820	100.0%	1,820
Tuscola, MI	0	1,701	100.0%	1,701
Wayne, MI	34,063	82	0.2%	34,145
Total	84,212	25,968	23.6%	110,180

\* Includes Rural and Highly Rural Locations.

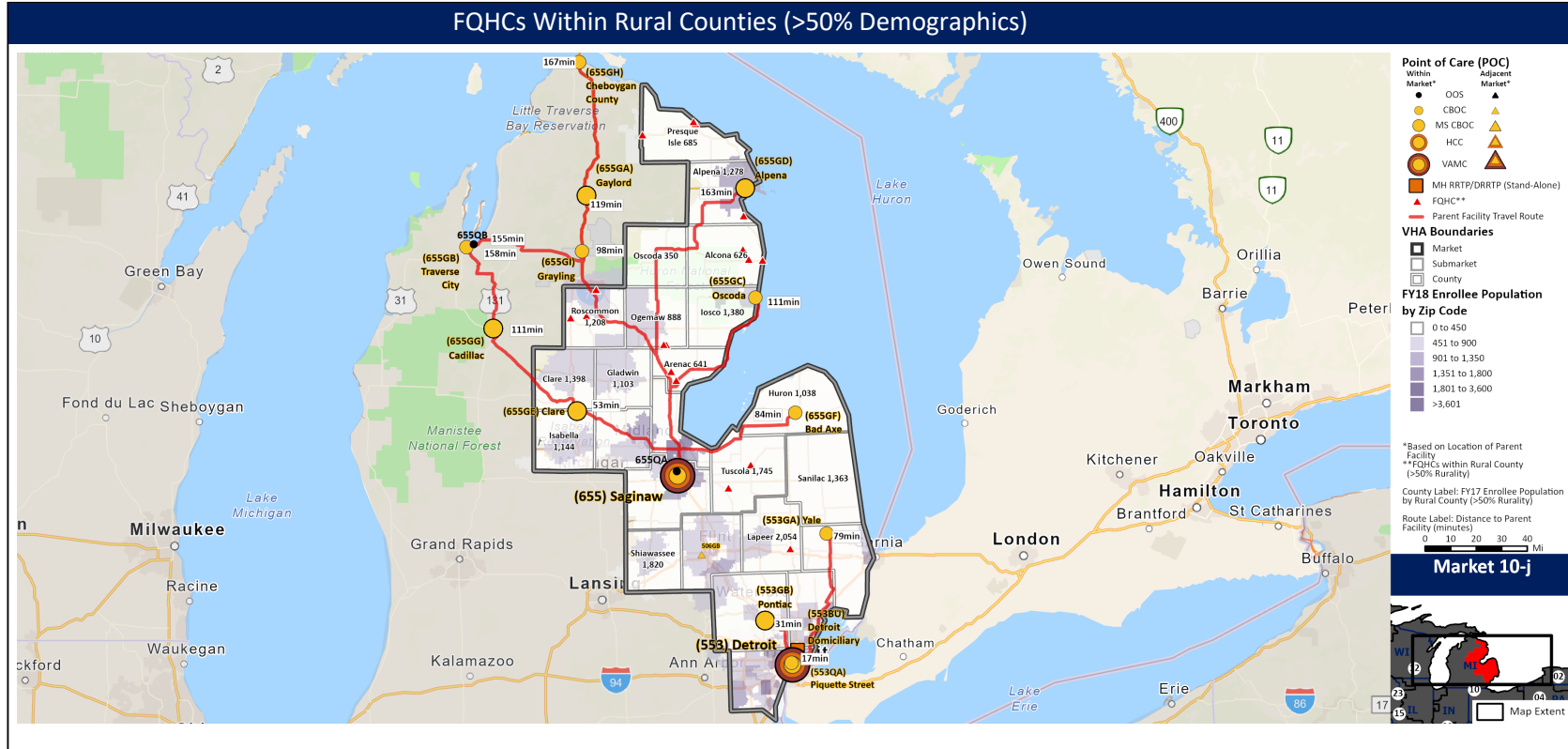
Source: Geocoded Enrollee File FY18Q4

1.13.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market

## Demographics ► Market Rurality



Source: 1. Geocoded Enrollee File FY18Q4 2. HRSA Data Warehouse

1.15.V10.EasternMichigan



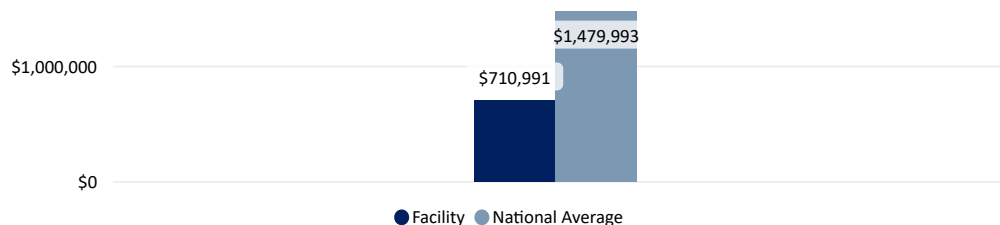
## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demographics ► Office of Rural Health FY19 Funded Project List

Parent Facility	Treating Facility Number	Treating Facility Name	Initiative Title	Approved Funding
(V10) (553) Detroit-Michigan	553	(V10) (553) Detroit-Michigan	Teledermatology Hub	\$495,800
(V10) (553) Detroit-Michigan	553GA	(V10) (553GA) Yale	Social Work in Patient Aligned Care Teams (PACT)	\$215,191

Office of Rural Health Project Funding Allocation		
Medical Center	% National 2019	Total Funding
Detroit-Michigan	0.41%	\$710,991
National	100.00%	\$173,159,235

FY19 Office of Rural Health Funded Project Allocation vs. Average National Allocation\*

Rank: **67** out of 117 Parent Facilities (ranked by total \$ funding)

\*111 Parent Facilities received ORH Funding Allocation for FY19

Note: The FY19 Funded Project List includes the top ten projects by approved funding.

Source: VHA Office of Rural Health

1.16.V10.EasternMichigan.553



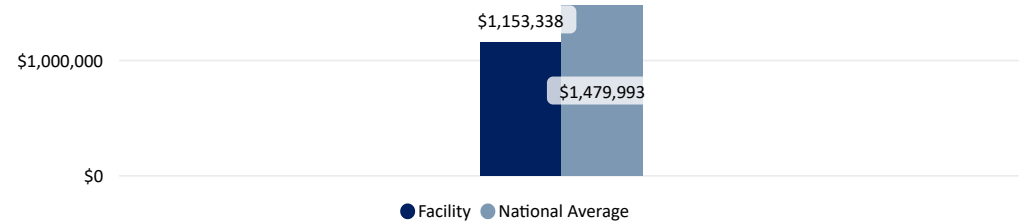
## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demographics ► Office of Rural Health FY19 Funded Project List

Parent Facility	Treating Facility Number	Treating Facility Name	Initiative Title	Approved Funding
(V10) (655) Saginaw-Michigan	655GC	(V10) (655GC) Oscoda	Home Based Primary Care (HBPC)	\$1,153,338

Office of Rural Health Project Funding Allocation		
Medical Center	% National 2019	Total Funding
Saginaw-Michigan	0.67%	\$1,153,338
National	100.00%	\$173,159,235

FY19 Office of Rural Health Funded Project Allocation vs. Average National Allocation\*

Rank: **47** out of 117 Parent Facilities (ranked by total \$ funding)

\*111 Parent Facilities received ORH Funding Allocation for FY19

Note: The FY19 Funded Project List includes the top ten projects by approved funding.

Source: VHA Office of Rural Health

1.16.V10.EasternMichigan.655



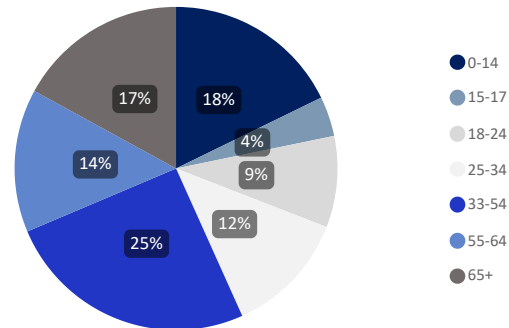
## VISN 10: Eastern Michigan Market

## Demographics ► Overall Market Population (Veterans and Non-Veterans) — Eastern Michigan Market

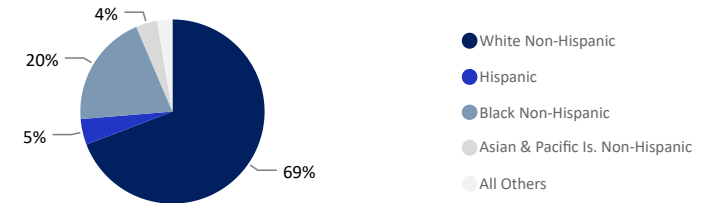
Demographic Summary – Eastern Michigan			
	2018	2028*	% Change
Population	5,391,054	5,371,363	-0.4%
Male	2,622,936	2,619,676	-0.1%
Female	2,768,118	2,751,687	-0.6%

\* Population projections available through 2023; straight line growth rates applied through 2028.

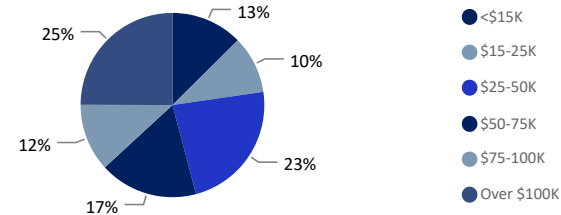
Population Distribution by Age Group



Population Distribution by Race/Ethnicity



Households by Income Group





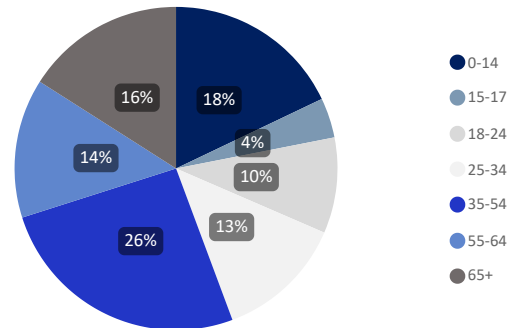
## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demographics ► Overall Parent Facility Area Population (Veterans and Non-Veterans) — Detroit-Michigan Area

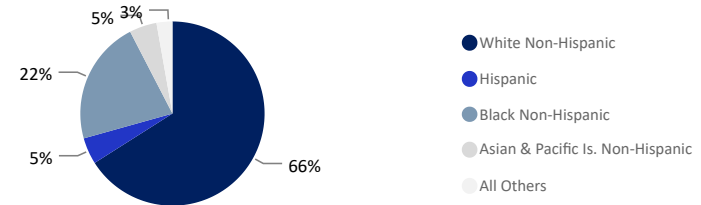
Demographic Summary – Detroit-Michigan Area			
	2018	2028*	% Change
Population	4,631,142	4,673,416	0.9%
Female	2,378,291	2,394,531	0.7%
Male	2,252,851	2,278,885	1.2%

\* Population projections available through 2023; straight line growth rates applied through 2028. Population based on area within 60 minute drive from applicable VAMC/HCC.

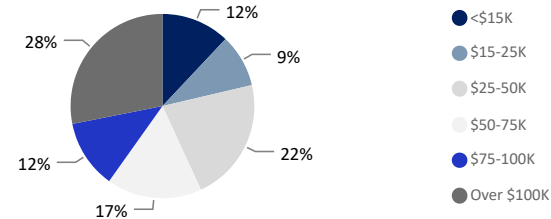
Population Distribution by Age Group



Population Distribution by Race/Ethnicity



Households by Income Group





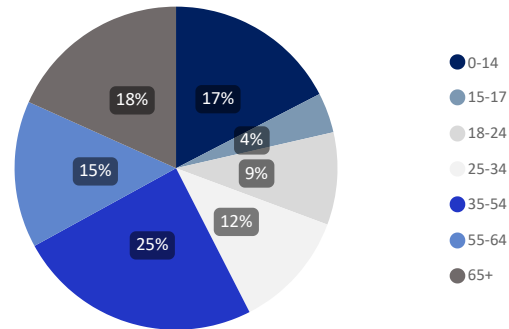
## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demographics ► Overall Parent Facility Area Population (Veterans and Non-Veterans) — Saginaw-Michigan Area

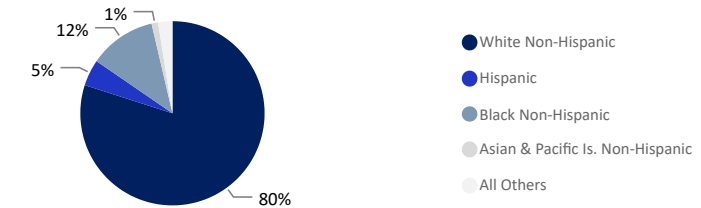
Demographic Summary – Saginaw-Michigan Area			
	2018	2028*	% Change
Population	1,059,143	1,027,603	-3.0%
Female	539,346	522,395	-3.1%
Male	519,797	505,213	-2.8%

\* Population projections available through 2023; straight line growth rates applied through 2028. Population based on area within 60 minute drive from applicable VAMC/HCC.

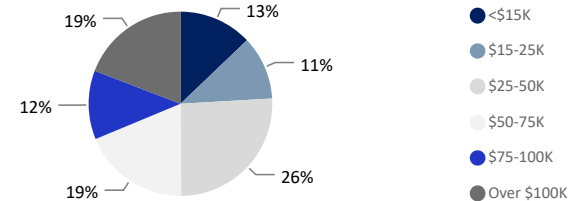
Population Distribution by Age Group



Population Distribution by Race/Ethnicity



Households by Income Group







## Demand ► Estimated Current and Historic Market Demand — Outpatient



## VISN 10: Eastern Michigan Market

## Demand ► Core Uniques Trends by Facility

Core Uniques*							
Facility	FY13	FY14	FY15	FY16	FY17	FY18	6 Year Change
(V10) (506GB) Flint	2,665	2,930	3,238	3,493	3,785	3,852	44.5%
(V10) (553) Detroit-Michigan	43,182	44,897	47,144	49,295	47,574	47,598	10.2%
(V10) (553BU) Detroit Domiciliary	106	118	129	199	226	210	98.1%
(V10) (553GA) Yale	4,098	4,314	4,309	4,350	4,412	4,443	8.4%
(V10) (553GB) Pontiac	2,989	3,436	3,639	3,834	3,801	3,938	31.7%
(V10) (553QA) Piquette Street	N/A	N/A	N/A	N/A	882	1,270	N/A
(V10) (655) Saginaw-Michigan	27,751	28,851	29,705	30,236	30,361	30,092	8.4%
(V10) (655GA) Gaylord - (V10) MichErie	3,596	3,616	3,433	3,638	3,630	3,712	3.2%
(V10) (655GB) Traverse City - (V10) MichE...	5,065	4,857	5,470	5,221	4,037	4,099	-19.1%
(V10) (655GC) Oscoda	1,770	2,044	1,812	1,737	1,773	1,767	-0.2%
(V10) (655GD) Alpena	1,946	2,052	1,945	2,331	2,934	3,079	58.2%
(V10) (655GE) Clare	3,686	3,820	4,047	4,081	4,200	4,275	16.0%
(V10) (655GF) Bad Axe	1,165	1,216	1,143	1,306	1,377	1,867	60.3%
(V10) (655GG) Cadillac - (V10) MichErie	2,394	2,595	2,854	3,143	3,441	3,657	52.8%
(V10) (655GH) Cheboygan County - (V10) ...	1,529	1,285	1,376	1,603	1,683	1,833	19.9%

\*Core uniques excludes uniques who have only used telephone triage, pharmacy, and lab.



## VISN 10: Eastern Michigan Market

## Demand ► Core Uniques Trends by Facility, cont.

Core Uniques*							
Facility	FY13	FY14	FY15	FY16	FY17	FY18	6 Year Change
(V10) (655GI) Grayling - (V10) MichErie	692	1,060	1,249	1,520	1,546	1,568	126.6%
(V10) (655QA) Saginaw-Barnard Road	N/A	N/A	N/A	N/A	3,807	5,099	N/A
(V10) (655QB) Grand Traverse - (V10) Mic...	N/A	N/A	N/A	1,827	2,787	3,071	N/A

\*Core uniques excludes uniques who have only used telephone triage, pharmacy, and lab.



## VISN 10: Eastern Michigan Market

## Demand ► Outpatient Encounters FY15-18

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506GB) Flint	5,609	5,644	5,815	4,971	6,603	6,999	7,510	8,909	1,138	1,139	1,355	1,284
<b>(V10) (506) Ann Arbor-Michigan Total</b>	<b>5,609</b>	<b>5,644</b>	<b>5,815</b>	<b>4,971</b>	<b>6,603</b>	<b>6,999</b>	<b>7,510</b>	<b>8,909</b>	<b>1,138</b>	<b>1,139</b>	<b>1,355</b>	<b>1,284</b>
(V10) (553) Detroit-Michigan	58,873	60,155	53,576	57,388	58,441	65,063	57,396	70,320	161,307	173,280	172,132	178,037
(V10) (553BU) Detroit Domiciliary	N/A	1,606	1,336	1,682	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(V10) (553GA) Yale	1,136	1,161	1,102	843	16,230	9,406	9,322	9,708	5	3	9	87
(V10) (553GB) Pontiac	1,171	1,262	1,198	1,111	6,270	6,640	6,198	6,656	4,017	4,534	4,806	4,617
(V10) (553QA) Piquette Street	N/A	N/A	19	N/A	N/A	N/A	473	689	N/A	N/A	N/A	N/A
<b>(V10) (553) Detroit-Michigan Total</b>	<b>61,180</b>	<b>64,184</b>	<b>57,231</b>	<b>61,024</b>	<b>80,941</b>	<b>81,109</b>	<b>73,389</b>	<b>87,373</b>	<b>165,329</b>	<b>177,817</b>	<b>176,947</b>	<b>182,741</b>
(V10) (655) Saginaw-Michigan	27,240	28,351	12,933	2,224	28,574	29,438	32,958	32,676	80,881	88,022	86,050	90,049
(V10) (655GA) Gaylord - (V10) MichErie	2,987	3,243	2,908	2,948	5,514	5,547	5,764	5,698	1,427	1,699	1,633	1,558
(V10) (655GB) Traverse City - (V10) MichErie	8,147	5,317	886	620	7,272	7,167	6,726	6,609	2,632	1,793	670	840
(V10) (655GC) Oscoda	1,623	1,202	1,487	1,307	3,384	3,371	3,446	3,161	1,199	1,210	1,330	1,479
(V10) (655GD) Alpena	1,790	1,696	1,737	1,685	3,598	3,744	4,232	4,394	2,826	3,008	3,270	3,666
(V10) (655GE) Clare	3,694	4,398	3,998	3,796	5,568	6,205	6,442	6,597	4,258	3,685	2,702	4,538
(V10) (655GF) Bad Axe	1,653	1,479	1,445	1,654	2,387	2,984	2,953	3,629	2,699	2,974	2,713	2,947
(V10) (655GG) Cadillac - (V10) MichErie	3,223	3,314	3,305	3,231	3,914	3,841	3,968	4,086	3,229	3,938	5,149	5,251
(V10) (655GH) Cheboygan County - (V10) MichErie	2,899	3,559	3,564	3,458	2,565	2,582	2,601	3,116	349	368	489	573
(V10) (655GI) Grayling - (V10) MichErie	1,632	1,804	2,257	2,103	2,449	2,714	2,436	2,658	971	1,035	946	869
(V10) (655QA) Saginaw-Barnard Road	N/A	N/A	16,481	27,283	N/A	N/A	N/A	N/A	N/A	N/A	238	355
(V10) (655QB) Grand Traverse - (V10) MichErie	N/A	3,071	7,858	7,921	N/A	N/A	N/A	N/A	N/A	882	1,578	2,422



## VISN 10: Eastern Michigan Market

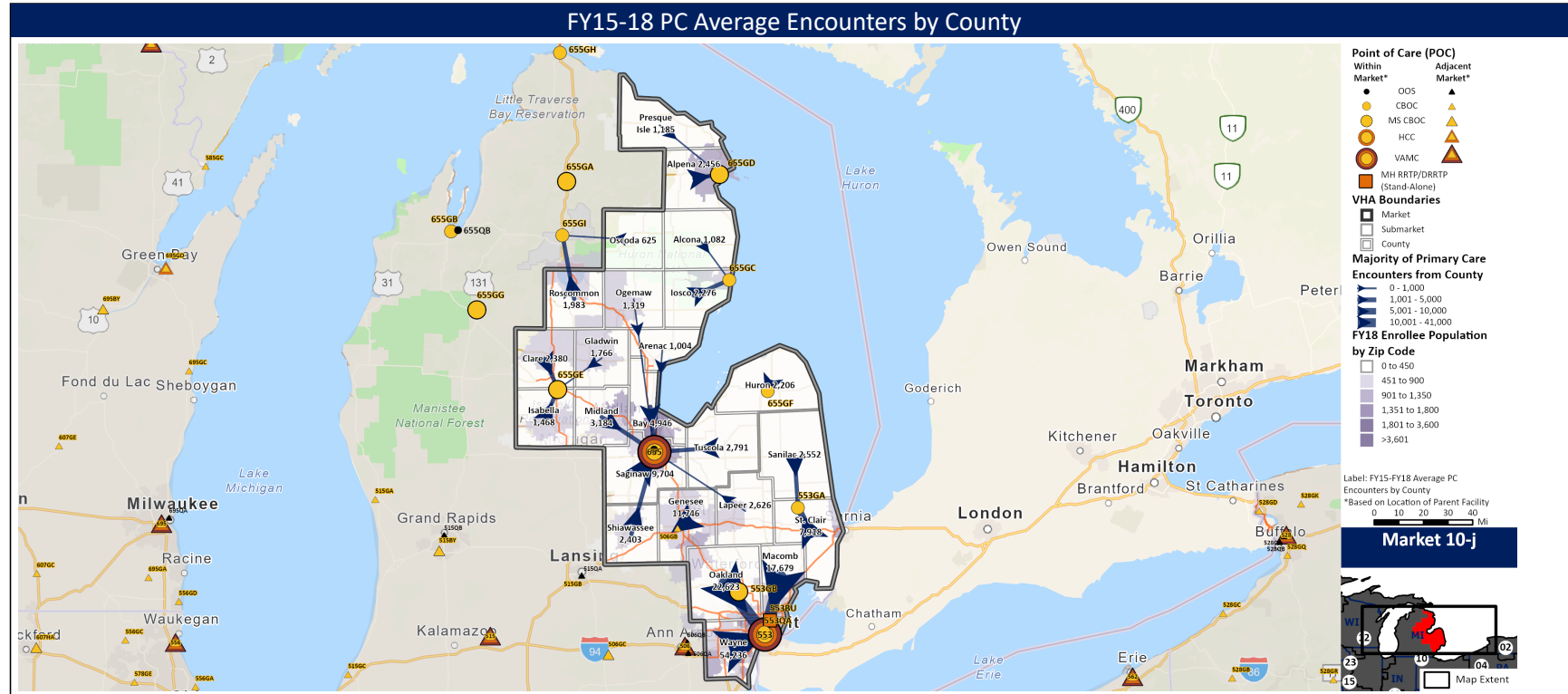
## Demand ► Outpatient Encounters FY15-18, cont.

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (655) Saginaw-Michigan Total	54,888	57,434	58,859	58,230	65,225	67,593	71,526	72,624	100,471	108,614	106,768	114,547
(V10) Eastern Michigan Total	121,677	127,262	121,905	124,225	152,769	155,701	152,425	168,906	266,938	287,570	285,070	298,572



## VISN 10: Eastern Michigan Market

## Demand ► Primary Care Encounters – FY15-18



Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.1.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Demand ► Primary Care Encounters – FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Alcona,MI	1,082	1,051	(655GC) Oscoda	49.2%
Alpena,MI	2,455	2,625	(655GD) Alpena	95.0%
Arenac,MI	1,003	1,030	(655) Saginaw-Michigan	72.5%
Bay,MI	4,946	5,385	(655) Saginaw-Michigan	97.2%
Clare,MI	2,379	2,571	(655GE) Clare	81.6%
Genesee,MI	11,745	12,845	(506GB) Flint	53.2%
Gladwin,MI	1,765	1,779	(655GE) Clare	55.0%
Huron,MI	2,205	2,466	(655GF) Bad Axe	86.4%
Iosco,MI	2,276	2,214	(655GC) Oscoda	84.2%
Isabella,MI	1,468	1,579	(655GE) Clare	73.3%
Lapeer,MI	2,626	2,669	(655) Saginaw-Michigan	31.5%
Macomb,MI	17,679	19,930	(553) Detroit-Michigan	79.4%
Midland,MI	3,183	3,428	(655) Saginaw-Michigan	76.4%
Oakland,MI	22,623	24,234	(553) Detroit-Michigan	44.3%
Ogemaw,MI	1,319	1,266	(655) Saginaw-Michigan	49.4%
Oscoda,MI	624	597	(655GI) Grayling	52.6%
Presque Isle,MI	1,185	1,273	(655GD) Alpena	63.6%
Roscommon,MI	1,983	1,984	(655GI) Grayling - (V10) MichErie	60.9%
Saginaw,MI	9,704	10,590	(655) Saginaw-Michigan	96.5%
Saint Clair,MI	7,917	7,224	(553GA) Yale	81.1%

Note: Yellow cells indicate counties going out of Market/VISN for the majority of encounters.

Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.1.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Demand ► Primary Care Encounters – FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Sanilac,MI	2,551	2,421	(553GA) Yale	52.9%
Shiawassee,MI	2,403	2,602	(655) Saginaw-Michigan	41.7%
Tuscola,MI	2,791	3,200	(655) Saginaw-Michigan	73.8%
Wayne,MI	54,236	58,133	(553) Detroit-Michigan	67.8%
<b>Total</b>	<b>162,148</b>	<b>173,096</b>		

Note: Yellow cells indicate counties going out of Market/VISN for the majority of encounters.

Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

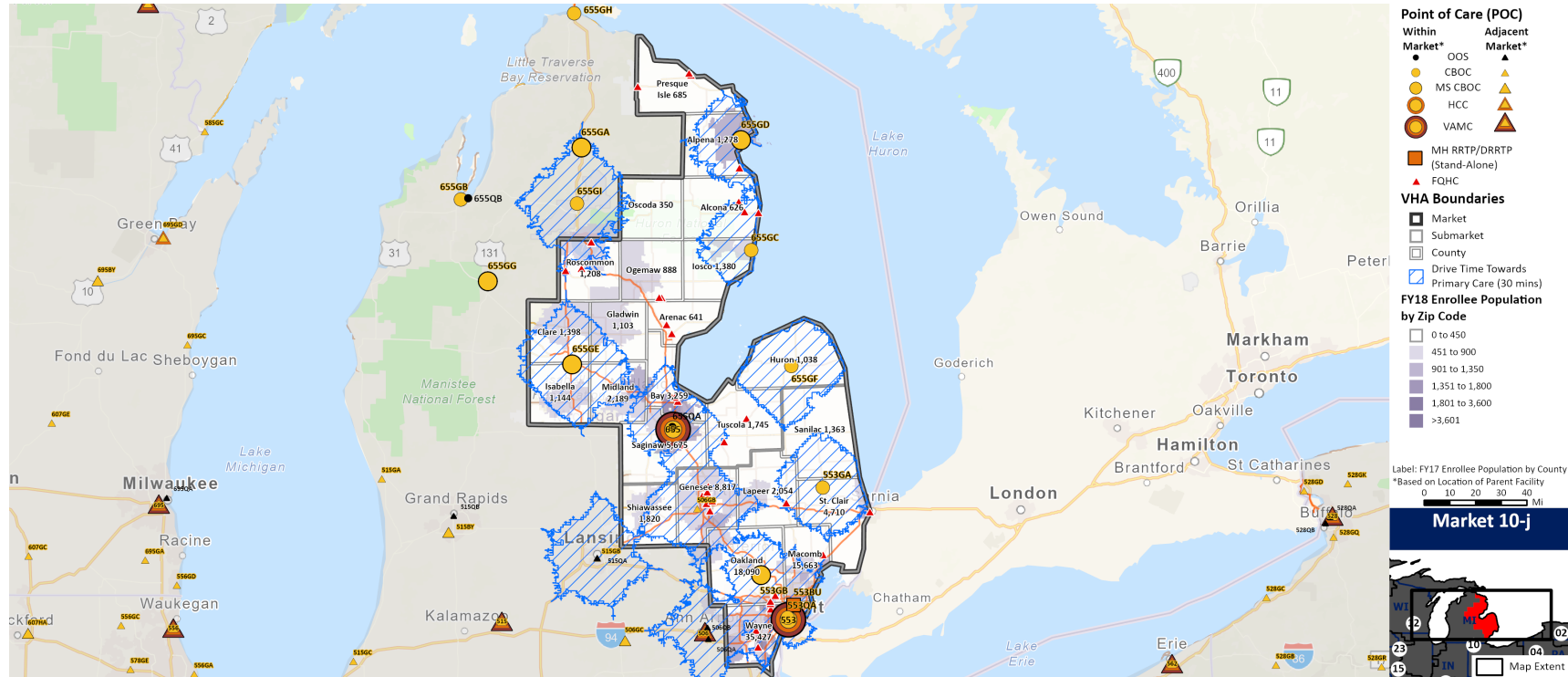
2.1.V10.EasternMichigan#2





## VISN 10: Eastern Michigan Market

## Demand ► Primary Care Drive Times for FY18 Enrollees



Source: Geocoded Enrollee File FY18Q4

2.3.V10.EasternMichigan



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► Top Primary Care Stop Code\* Trends FY15-FY18 — Detroit-Michigan

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch
(V10) (553) Detroit-Michigan	(323) PRIMARY CARE/MEDICINE	54,668	60,363	52,857	64,853	18.6%	23,008	22,509	21,566	22,102	-3.9%	52,703	53,279	48,998	57,688	9.5%
(V10) (553) Detroit-Michigan	(322) Comprehensive Women's Primary Care Clinic	3,773	4,700	4,539	5,467	44.9%	1,605	1,662	1,692	1,757	9.5%	4,149	4,424	4,748	4,904	18.2%
(V10) (553GA) Yale	(323) PRIMARY CARE/MEDICINE	16,230	9,406	9,322	9,708	-40.2%	4,228	4,247	4,334	4,320	2.2%	14,053	12,077	13,381	13,816	-1.7%
(V10) (553GB) Pontiac	(323) PRIMARY CARE/MEDICINE	6,269	6,639	6,198	6,656	6.2%	3,118	3,281	3,269	3,405	9.2%	6,206	6,446	5,947	6,285	1.3%
(V10) (553GB) Pontiac	(350) GeriPACT	1	1	N/A	N/A	-100.0%	1	1	N/A	N/A	-100.0%	0	0	N/A	N/A	
(V10) (553QA) Piquette Street	(323) PRIMARY CARE/MEDICINE	N/A	N/A	473	689		N/A	N/A	199	207		N/A	N/A	455	767	

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments. \* Includes top 3 stop codes, where applicable (some sites reported less than 3).

Source: VSSC Encounters Cube – Public Grouping (Primary Care)

2.4.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Top Primary Care Stop Code\* Trends FY15-FY18 — Saginaw-Michigan

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch
(V10) (655) Saginaw-Michigan	(323) PRIMARY CARE/MEDICINE	28,574	29,438	32,958	32,676	14.4%	12,306	12,510	12,747	12,785	3.9%	28,426	30,680	35,298	37,213	30.9%
(V10) (655GA) Gaylord - (V10) MichErie	(323) PRIMARY CARE/MEDICINE	5,514	5,547	5,764	5,698	3.3%	2,699	2,638	2,730	2,766	2.5%	4,981	5,051	5,507	5,885	18.1%
(V10) (655GB) Traverse City - (V10) MichErie	(323) PRIMARY CARE/MEDICINE	7,272	7,167	6,726	6,609	-9.1%	3,645	3,617	3,636	3,668	0.6%	7,907	7,128	7,107	7,827	-1.0%
(V10) (655GC) Oscoda	(323) PRIMARY CARE/MEDICINE	3,384	3,371	3,446	3,161	-6.6%	1,642	1,635	1,607	1,575	-4.1%	3,187	3,282	3,270	3,219	1.0%
(V10) (655GD) Alpena	(323) PRIMARY CARE/MEDICINE	3,598	3,744	4,232	4,394	22.1%	1,565	1,579	1,609	1,631	4.2%	3,387	4,063	4,310	4,743	40.0%
(V10) (655GE) Clare	(323) PRIMARY CARE/MEDICINE	5,568	6,202	6,442	6,597	18.5%	2,954	3,005	3,129	3,194	8.1%	5,320	6,084	6,627	7,412	39.3%
(V10) (655GE) Clare	(350) GeriPACT	N/A	3	N/A	N/A		N/A	1	N/A	N/A		N/A	0	N/A	N/A	

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments. \* Includes top 3 stop codes, where applicable (some sites reported less than 3).

Source: VSSC Encounters Cube – Public Grouping (Primary Care)

2.4.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Top Primary Care Stop Code\* Trends FY15-FY18 — Saginaw-Michigan, cont.

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch
(V10) (655GF) Bad Axe	(323) PRIMARY CARE/MEDICINE	2,387	2,984	2,953	3,629	52.0%	989	1,029	1,094	1,255	26.9%	2,741	3,258	2,879	4,179	52.5%
(V10) (655GG) Cadillac - (V10) MichErie	(323) PRIMARY CARE/MEDICINE	3,914	3,841	3,968	4,086	4.4%	1,695	1,772	1,830	1,967	16.0%	3,712	3,683	3,998	4,468	20.3%
(V10) (655GH) Cheboygan County - (V10) MichErie	(323) PRIMARY CARE/MEDICINE	2,565	2,582	2,601	3,116	21.5%	911	949	989	1,110	21.8%	2,844	2,643	2,805	3,677	29.3%
(V10) (655GI) Grayling - (V10) MichErie	(323) PRIMARY CARE/MEDICINE	2,449	2,714	2,436	2,658	8.5%	895	1,112	1,156	1,214	35.6%	2,556	2,790	2,294	2,681	4.9%

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments. \* Includes top 3 stop codes, where applicable (some sites reported less than 3).

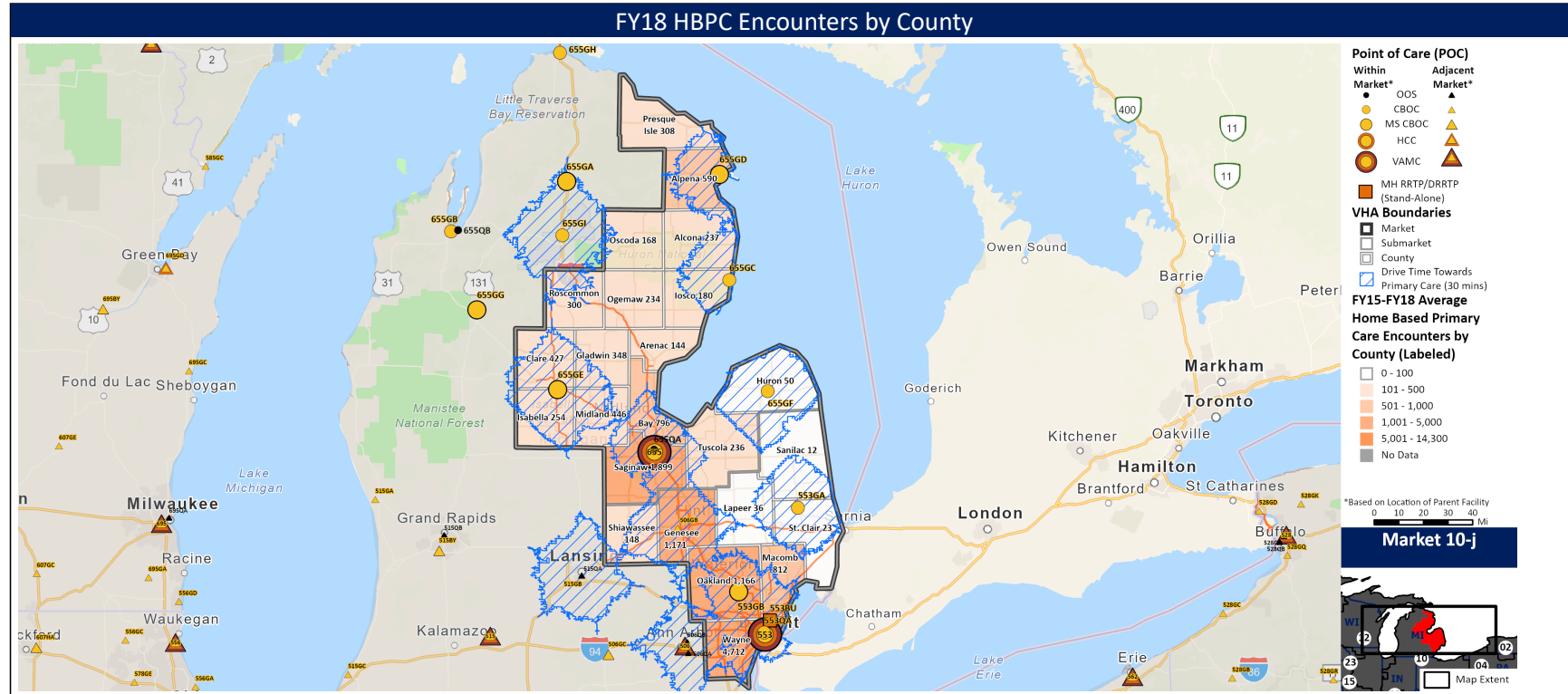
Source: VSSC Encounters Cube – Public Grouping (Primary Care)

2.4.V10.EasternMichigan.655#2



## VISN 10: Eastern Michigan Market

## Demand ► Home-Based Primary Care



Source: VSSC Encounters Cube

2.14.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Demand ► Home-Based Primary Care, cont.

## FY15-18 HBPC Uniques &amp; Encounter Distribution

Facility	Uniques					Encounters				
	FY15	FY16	FY17	FY18	AVG	FY15	FY16	FY17	FY18	AVG
(553) Detroit-Michigan	536	633	463	345	494	6,587	5,733	4,655	3,490	5,116
(655) Saginaw-Michigan	391	370	303	263	331	5,226	5,501	4,487	4,085	4,824
(655GA) Gaylord - (V10) MichErie	85	91	122	108	101	1,250	1,340	1,442	1,592	1,406
(655GB) Traverse City - (V10) MichErie	96	82	N/A	N/A	89	1,293	922	N/A	N/A	1,107
(655GC) Oscoda	1	N/A	44	53	32	1	N/A	474	932	469
(655GD) Alpena	91	80	98	129	99	1,396	1,308	1,297	1,496	1,374
(655GE) Clare	131	114	139	137	130	1,438	1,601	1,646	1,525	1,552
(655GG) Cadillac - (V10) MichErie	4	4	6	8	5	4	5	13	12	8
(655GI) Grayling - (V10) MichErie	2	N/A	1	2	1	2	N/A	1	2	1
(655QB) Grand Traverse - (V10) MichErie	N/A	78	98	87	87	N/A	662	1,524	1,540	1,242



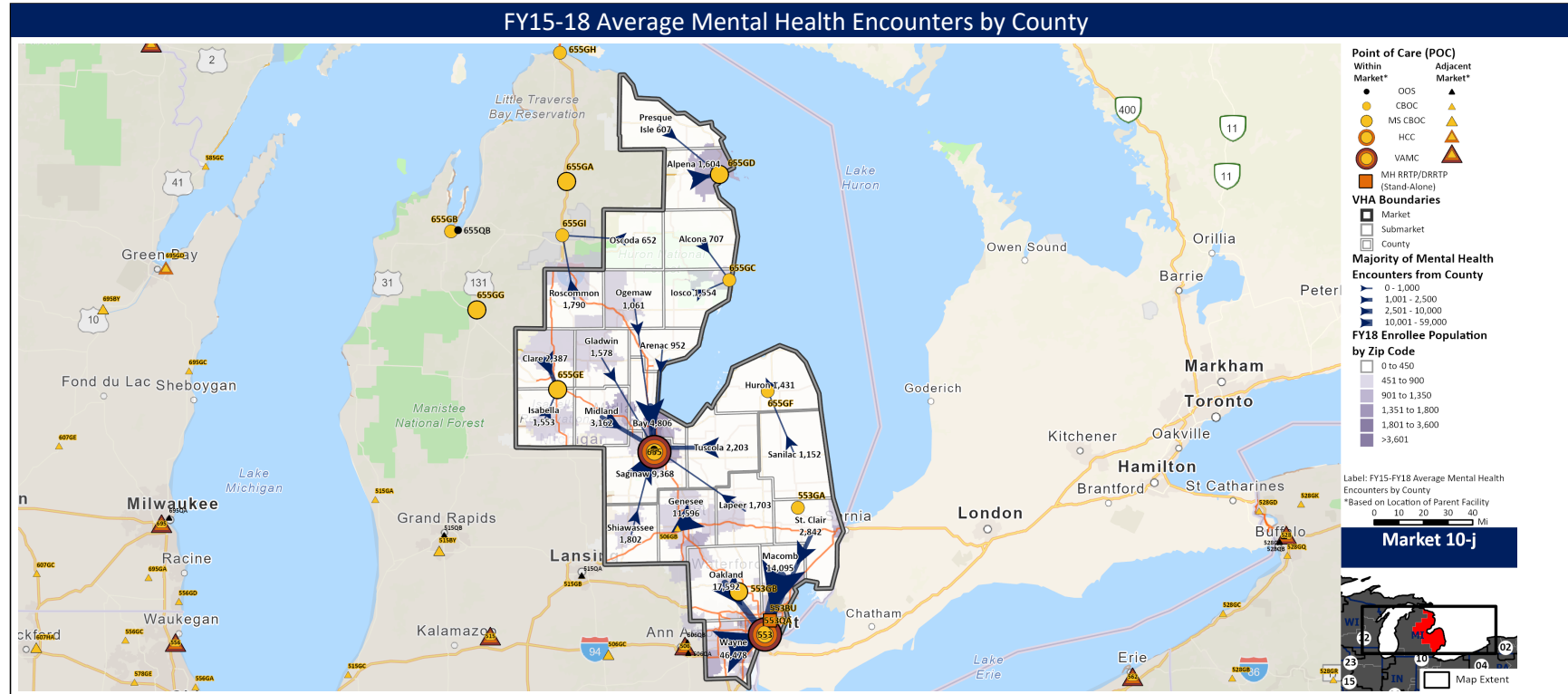
## VISN 10: Eastern Michigan Market

## Demand ► Home-Based Primary Care by Provider Type

FY18 HBPC Encounters by Provider Type						
Provider Type	MD	RN	SW	MH	RD	Other
Encounters	210	8,285	1,744	781	719	2,935
Percentage	1.4%	56.5%	11.9%	5.3%	4.9%	20.0%

## VISN 10: Eastern Michigan Market

## Demand ► Mental Health Encounters – FY15-18



Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.5.V10.EasternMichigan#IMG





## VISN 10: Eastern Michigan Market

## Demand ► Mental Health Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Alcona,MI	707	678	(V10) (655GC) Oscoda	38.8%
Alpena,MI	1,604	1,497	(V10) (655GD) Alpena	62.7%
Arenac,MI	952	1,088	(V10) (655QA) Saginaw-Barnard Road	64.9%
Bay,MI	4,806	5,052	(V10) (655QA) Saginaw-Barnard Road	85.2%
Clare,MI	2,387	2,619	(V10) (655GE) Clare	42.7%
Genesee,MI	11,596	11,265	(V10) (506GB) Flint	34.2%
Gladwin,MI	1,578	1,577	(V10) (655QA) Saginaw-Barnard Road	42.4%
Huron,MI	1,431	1,380	(V10) (655GF) Bad Axe	57.8%
Iosco,MI	1,554	1,319	(V10) (655GC) Oscoda	55.6%
Isabella,MI	1,553	1,530	(V10) (655GE) Clare	47.7%
Lapeer,MI	1,703	1,696	(V10) (655QA) Saginaw-Barnard Road	36.3%
Macomb,MI	14,095	14,582	(V10) (553) Detroit-Michigan	83.7%
Midland,MI	3,163	3,175	(V10) (655QA) Saginaw-Barnard Road	66.3%
Oakland,MI	17,592	17,761	(V10) (553) Detroit-Michigan	53.9%
Ogemaw,MI	1,061	854	(V10) (655QA) Saginaw-Barnard Road	49.1%
Oscoda,MI	652	551	(V10) (655GI) Grayling	38.1%
Presque Isle,MI	607	587	(V10) (655GD) Alpena	47.4%
Roscommon,MI	1,790	1,705	(V10) (655GI) Grayling	47.9%

Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.5.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Demand ► Mental Health Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Saginaw,MI	9,368	9,594	(V10) (655QA) Saginaw-Barnard Road	80.4%
Saint Clair,MI	2,842	2,488	(V10) (553) Detroit-Michigan	63.5%
Sanilac,MI	1,152	1,058	(V10) (655GF) Bad Axe	34.8%
Shiawassee,MI	1,802	1,711	(V10) (655QA) Saginaw-Barnard Road	38.1%
Tuscola,MI	2,203	2,417	(V10) (655QA) Saginaw-Barnard Road	61.7%
Wayne,MI	46,478	46,608	(V10) (553) Detroit-Michigan	65.3%
Total	132,674	132,792		



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► Top Mental Health Stop Code\* Trends FY15-FY18 — Detroit-Michigan

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr Ch.	FY15	FY16	FY17	FY18	4 Yr Ch.	FY15	FY16	FY17	FY18	4 Yr. Ch.
(V10) (553) Detroit-Michigan	(502) MH CLINIC IND	33,086	38,097	37,489	36,280	9.7%	6,376	7,375	7,648	7,327	14.9%	50,587	55,098	55,414	56,885	12.5%
(V10) (553) Detroit-Michigan	(560) SUB USE DISORDER GROUP	5,700	4,384	3,948	6,010	5.4%	566	446	451	492	-13.1%	1,340	1,215	1,753	3,235	141.5%
(V10) (553) Detroit-Michigan	(550) MH CLINIC GROUP	3,193	3,856	4,567	5,691	78.2%	513	639	747	834	62.6%	2,008	2,042	2,569	2,736	36.3%
(V10) (553BU) Detroit Domiciliary	(587) Residential Rehabilitation Treatment Program (RRTP)- Group	N/A	1,606	1,336	1,682	0.0%	N/A	106	100	93	0.0%	N/A	1,080	504	483	0.0%
(V10) (553GA) Yale	(502) MH CLINIC IND	1,135	1,161	1,102	843	-25.7%	304	282	272	266	-12.5%	2,253	2,336	1,911	1,619	-28.2%
(V10) (553GA) Yale	(513) SUB USE DISORDER INDIV	1	N/A	N/A	N/A	-100.0%	1	N/A	N/A	N/A	-100.0%	0	N/A	N/A	N/A	0.0%
(V10) (553GB) Pontiac	(502) MH CLINIC IND	1,105	1,262	1,143	1,074	-2.8%	462	519	505	468	1.3%	10	30	11	0	-100.1%
(V10) (553GB) Pontiac	(550) MH CLINIC GROUP	N/A	N/A	55	37	0.0%	N/A	N/A	4	6	0.0%	N/A	N/A	0	0	0.0%
(V10) (553GB) Pontiac	(560) SUB USE DISORDER GROUP	51	N/A	N/A	N/A	-100.0%	13	N/A	N/A	N/A	-100.0%	0	N/A	N/A	N/A	0.0%
(V10) (553QA) Piquette Street	(502) MH CLINIC IND	N/A	N/A	19	N/A	0.0%	N/A	N/A	9	N/A	0.0%	N/A	N/A	5	N/A	0.0%

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

\*Includes top 3 stop codes, where applicable (some sites reported less than 3)

Source: VSSC Encounters Cube – Public Grouping (Mental Health)

2.7.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Top Mental Health Stop Code\* Trends FY15-FY18 — Saginaw-Michigan

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr. Ch.	FY15	FY16	FY17	FY18	4 Yr. Ch.	FY15	FY16	FY17	FY18	4 Yr. Ch.
(V10) (655) Saginaw-Michigan	(534) MH INTGRD CARE IND	2,711	2,565	2,568	2,101	-22.5%	1,150	1,168	1,140	1,039	-9.7%	5,108	4,877	4,485	3,864	-24.4%
(V10) (655) Saginaw-Michigan	(502) MH CLINIC IND	14,927	16,680	6,961	99	-99.3%	2,654	3,174	2,410	55	-97.9%	26,809	28,741	11,957	108	-99.6%
(V10) (655) Saginaw-Michigan	(513) SUB USE DISORDER INDIV	2,198	2,041	858	20	-99.1%	432	361	241	3	-99.3%	3,972	3,803	1,498	0	-100.0%
(V10) (655GA) Gaylord - (V10) MichErie	(502) MH CLINIC IND	2,595	2,899	2,849	2,844	9.6%	481	487	514	533	10.8%	4,394	4,528	4,454	4,503	2.5%
(V10) (655GA) Gaylord - (V10) MichErie	(513) SUB USE DISORDER INDIV	N/A	3	48	97	0.0%	N/A	1	6	8	0.0%	N/A	0	0	0	0.0%
(V10) (655GA) Gaylord - (V10) MichErie	(560) SUB USE DISORDER GROUP	71	33	10	6	-91.5%	16	8	6	1	-93.8%	0	0	0	0	0.0%
(V10) (655GB) Traverse City - (V10) MichErie	(534) MH INTGRD CARE IND	596	613	853	589	-1.2%	232	254	342	277	19.4%	1,236	1,642	1,883	909	-26.4%
(V10) (655GB) Traverse City - (V10) MichErie	(550) MH CLINIC GROUP	668	368	33	31	-95.4%	70	61	11	9	-87.1%	410	182	1	0	-100.0%
(V10) (655GB) Traverse City - (V10) MichErie	(560) SUB USE DISORDER GROUP	110	26	N/A	N/A	-100.0%	21	11	N/A	N/A	-100.0%	41	8	N/A	N/A	-99.9%
(V10) (655GC) Oscoda	(502) MH CLINIC IND	1,611	1,177	1,458	1,307	-18.9%	278	269	282	293	5.4%	2,906	1,579	2,883	2,197	-24.4%
(V10) (655GC) Oscoda	(513) SUB USE DISORDER INDIV	N/A	5	27	N/A	0.0%	N/A	1	4	N/A	0.0%	N/A	0	3	N/A	0.0%
(V10) (655GC) Oscoda	(560) SUB USE DISORDER GROUP	12	20	2	N/A	-100.0%	3	3	1	N/A	-100.0%	0	0	0	N/A	0.0%
(V10) (655GD) Alpena	(502) MH CLINIC IND	1,753	1,678	1,719	1,647	-6.0%	285	302	322	325	14.0%	2,223	2,209	2,129	1,981	-10.9%
(V10) (655GD) Alpena	(513) SUB USE DISORDER INDIV	N/A	1	12	36	0.0%	N/A	1	1	2	0.0%	N/A	0	0	0	0.0%
(V10) (655GD) Alpena	(560) SUB USE DISORDER GROUP	37	17	6	2	-94.6%	5	5	2	1	-80.0%	0	0	0	0	0.0%
(V10) (655GE) Clare	(502) MH CLINIC IND	3,163	3,575	3,525	3,385	7.0%	585	601	717	732	25.1%	4,751	5,802	5,435	5,433	14.4%
(V10) (655GE) Clare	(550) MH CLINIC GROUP	168	246	194	214	27.4%	16	14	16	20	25.0%	0	1	14	0	0.0%
(V10) (655GE) Clare	(513) SUB USE DISORDER INDIV	N/A	4	118	156	0.0%	N/A	3	15	18	0.0%	N/A	0	0	0	0.0%
(V10) (655GF) Bad Axe	(502) MH CLINIC IND	1,472	1,396	1,316	1,421	-3.5%	195	209	208	222	13.8%	2,853	2,712	2,538	2,742	-3.9%
(V10) (655GF) Bad Axe	(513) SUB USE DISORDER INDIV	N/A	2	39	178	0.0%	N/A	2	6	9	0.0%	N/A	1	0	1	0.0%

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\*Includes top 3 stop codes, where applicable (some sites reported less than 3)

Source: VSSC Encounters Cube – Public Grouping (Mental Health)

2.7.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Top Mental Health Stop Code\* Trends FY15-FY18 — Saginaw-Michigan, cont.

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr Ch.	FY15	FY16	FY17	FY18	4 Yr Ch.	FY15	FY16	FY17	FY18	4 Yr Ch.
(V10) (655GF) Bad Axe	(560) SUB USE DISORDER GROUP	9	N/A	23	38	322.2%	4	N/A	6	8	100.0%	0	N/A	0	0	0.0%
(V10) (655GG) Cadillac - (V10) MichErie	(502) MH CLINIC IND	3,165	3,240	3,249	3,168	0.1%	560	694	664	616	10.0%	5,469	5,564	5,654	5,431	-0.7%
(V10) (655GG) Cadillac - (V10) MichErie	(560) SUB USE DISORDER GROUP	38	23	24	44	15.8%	7	7	5	8	14.3%	0	0	0	0	0.0%
(V10) (655GG) Cadillac - (V10) MichErie	(513) SUB USE DISORDER INDIV	N/A	N/A	23	19	0.0%	N/A	N/A	2	3	0.0%	N/A	N/A	0	0	0.0%
(V10) (655GH) Cheboygan County - (V10) MichErie	(502) MH CLINIC IND	2,767	3,352	3,294	3,145	13.7%	670	759	812	827	23.4%	4,749	6,775	6,719	6,375	34.2%
(V10) (655GH) Cheboygan County - (V10) MichErie	(550) MH CLINIC GROUP	124	175	233	281	126.6%	13	17	25	32	146.2%	4	0	1	0	-101.1%
(V10) (655GH) Cheboygan County - (V10) MichErie	(560) SUB USE DISORDER GROUP	8	23	15	17	112.5%	2	4	3	3	50.0%	0	0	0	1	0.0%
(V10) (655GI) Grayling - (V10) MichErie	(502) MH CLINIC IND	1,383	1,526	1,953	1,787	29.2%	233	293	344	345	48.1%	2,109	2,817	3,590	3,052	44.7%
(V10) (655GI) Grayling - (V10) MichErie	(550) MH CLINIC GROUP	204	268	267	225	10.3%	22	26	25	23	4.5%	0	0	0	0	0.0%
(V10) (655GI) Grayling - (V10) MichErie	(560) SUB USE DISORDER GROUP	44	10	32	48	9.1%	7	5	8	8	14.3%	0	0	0	0	0.0%
(V10) (655QA) Saginaw-Barnard Road	(502) MH CLINIC IND	N/A	N/A	10,865	18,496	0.0%	N/A	N/A	2,883	3,696	0.0%	N/A	N/A	19,678	31,500	0.0%
(V10) (655QA) Saginaw-Barnard Road	(513) SUB USE DISORDER INDIV	N/A	N/A	1,593	2,940	0.0%	N/A	N/A	375	521	0.0%	N/A	N/A	2,727	4,578	0.0%
(V10) (655QA) Saginaw-Barnard Road	(560) SUB USE DISORDER GROUP	N/A	N/A	1,282	2,097	0.0%	N/A	N/A	140	181	0.0%	N/A	N/A	816	1,276	0.0%
(V10) (655QB) Grand Traverse - (V10) MichErie	(502) MH CLINIC IND	N/A	2,806	7,240	7,490	0.0%	N/A	1,464	2,164	2,285	0.0%	N/A	5,436	13,551	13,654	0.0%
(V10) (655QB) Grand Traverse - (V10) MichErie	(562) PTSD-INDIV	N/A	41	149	149	0.0%	N/A	9	16	31	0.0%	N/A	166	599	508	0.0%

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

\*Includes top 3 stop codes, where applicable (some sites reported less than 3)

Source: VSSC Encounters Cube – Public Grouping (Mental Health)

2.7.V10.EasternMichigan.655#2



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

**Demand** ► **Top Mental Health Stop Code\* Trends FY15-FY18 — Saginaw-Michigan, cont.**

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr. Ch.	FY15	FY16	FY17	FY18	4 Yr. Ch.	FY15	FY16	FY17	FY18	4 Yr. Ch.
(V10) (655QB) Grand Traverse - (V10) MichErie	(550) MH CLINIC GROUP	N/A	171	393	122	0.0%	N/A	40	65	22	0.0%	N/A	103	233	70	0.0%

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

\*Includes top 3 stop codes, where applicable (some sites reported less than 3)

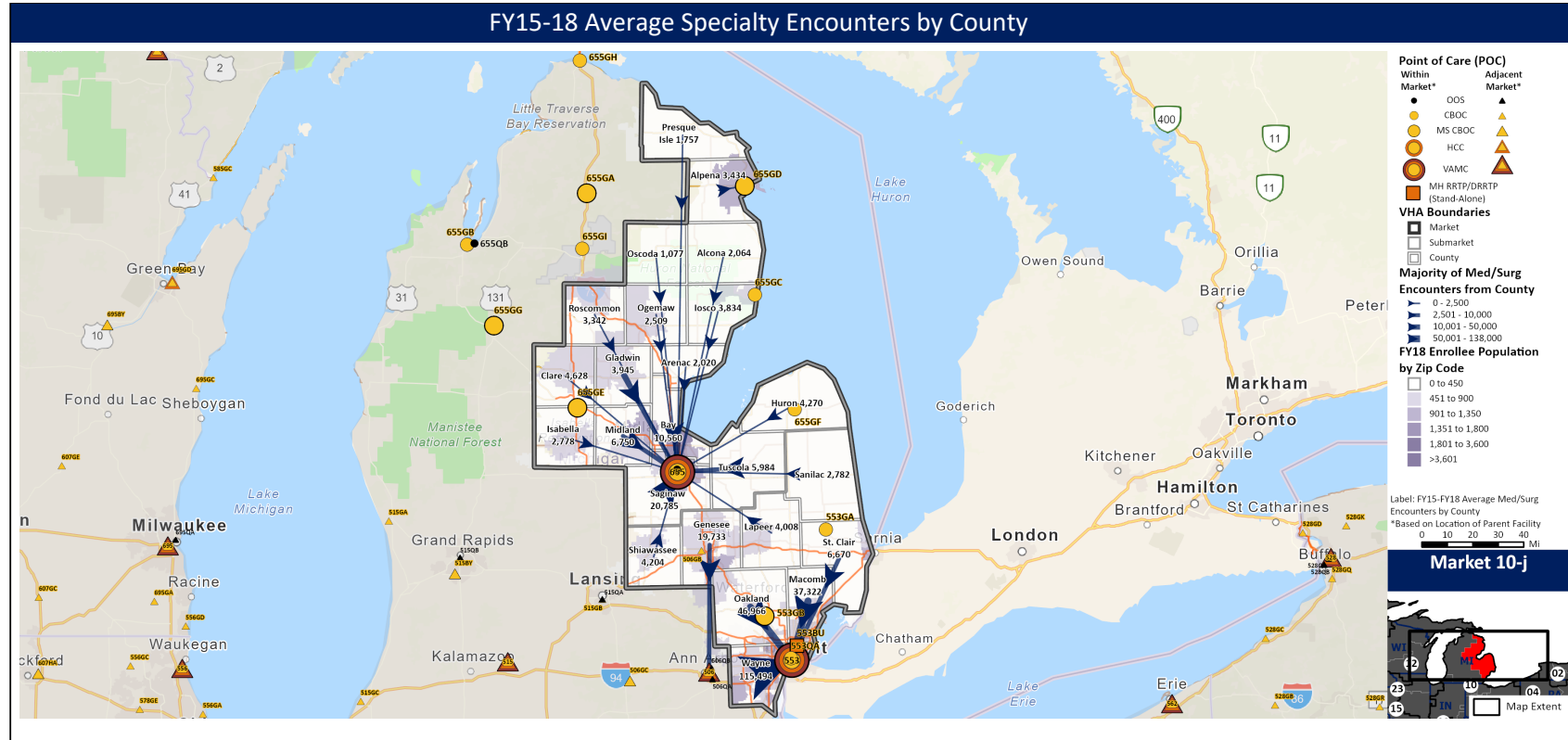
Source: VSSC Encounters Cube – Public Grouping (Mental Health)

2.7.V10.EasternMichigan.655#2



## VISN 10: Eastern Michigan Market

## Demand ► Specialty Encounters – FY15-18



Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.8.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Demand ► Specialty Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Alpena,MI	3,434	3,799	(V10) (655GD) Alpena	48.1%
Alcona,MI	2,064	2,043	(V10) (655) Saginaw-Michigan	40.9%
Bay,MI	10,560	11,999	(V10) (655) Saginaw-Michigan	86.1%
Arenac,MI	2,020	2,043	(V10) (655) Saginaw-Michigan	75.8%
Oakland,MI	46,966	48,664	(V10) (553) Detroit-Michigan	62.9%
Isabella,MI	2,778	2,862	(V10) (655) Saginaw-Michigan	61.0%
Macomb,MI	37,322	40,364	(V10) (553) Detroit-Michigan	89.8%
Lapeer,MI	4,009	4,045	(V10) (655) Saginaw-Michigan	39.9%
Clare,MI	4,628	4,823	(V10) (655) Saginaw-Michigan	51.4%
Huron,MI	4,270	4,553	(V10) (655) Saginaw-Michigan	44.2%
Iosco,MI	3,834	3,871	(V10) (655) Saginaw-Michigan	54.7%
Genesee,MI	19,733	20,330	(V10) (506) Ann Arbor-Michigan	43.3%
Gladwin,MI	3,945	3,775	(V10) (655) Saginaw-Michigan	64.6%
Midland,MI	6,750	7,360	(V10) (655) Saginaw-Michigan	79.0%
Presque Isle,MI	1,757	1,759	(V10) (655) Saginaw-Michigan	41.8%
Roscommon,MI	3,342	3,240	(V10) (655) Saginaw-Michigan	49.4%
Saginaw,MI	20,785	22,852	(V10) (655) Saginaw-Michigan	86.7%
Saint Clair,MI	6,670	6,292	(V10) (553) Detroit-Michigan	86.3%

Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.8.V10.EasternMichigan





## VISN 10: Eastern Michigan Market

## Demand ► Specialty Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Ogemaw,MI	2,509	2,350	(V10) (655) Saginaw-Michigan	73.2%
Sanilac,MI	2,782	2,752	(V10) (655) Saginaw-Michigan	37.9%
Oscoda,MI	1,077	1,061	(V10) (655) Saginaw-Michigan	57.0%
Wayne,MI	115,494	117,894	(V10) (553) Detroit-Michigan	71.9%
Shiawassee,MI	4,204	4,403	(V10) (655) Saginaw-Michigan	45.8%
Tuscola,MI	5,985	7,017	(V10) (655) Saginaw-Michigan	77.1%
Total	316,915	330,151		



## VISN 10: Eastern Michigan Market

## Demand ► Specialty Care Stop Code Trends FY15-18

Specialty Title	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
(V10) (506GB) Flint	1,134	1,122	1,323	1,246	9.9%	77	54	56	13	-83.5%
Cardiology	3	4	10	30	900.0%	0	0	0	0	N/A
Clinical Pharmacology	670	666	765	799	19.3%	41	3	1	0	-100.0%
Dermatology	138	187	194	213	54.3%	0	0	0	0	-100.0%
Gastroenterology	N/A	3	59	34	N/A	N/A	0	11	5	N/A
Geriatric Medicine	16	22	3	N/A	-100.0%	0	0	0	N/A	N/A
Hematology-Oncology	18	18	7	12	-33.3%	0	0	0	0	N/A
Internal Medicine	98	35	59	31	-68.4%	0	0	0	0	N/A
Nutrition	189	174	208	119	-37.0%	36	51	44	7	-80.4%
Urology	2	13	18	8	300.0%	0	0	0	0	N/A
(V10) (553) Detroit-Michigan	150,032	160,780	159,171	165,072	10.0%	172,872	193,568	196,493	207,277	19.9%
Allergy and Immunology	995	1,019	1,151	1,107	11.3%	990	1,018	972	975	-1.6%
Audiology & Speech Pathology	10,223	10,382	9,713	9,904	-3.1%	6,795	6,637	5,876	5,700	-16.1%
Cardiology	9,033	10,272	10,342	10,893	20.6%	12,553	13,532	13,870	15,364	22.4%
Clinical Pharmacology	517	599	682	671	29.8%	40	1	0	0	-100.0%
Critical Care / Pulmonary Disease	3,088	3,316	4,328	4,983	61.4%	4,903	5,202	7,178	8,375	70.8%
Dermatology	17,445	19,302	17,349	17,866	2.4%	19,501	21,459	18,698	19,004	-2.5%
Endocrinology	2,709	2,781	2,990	3,198	18.1%	2,446	2,548	3,102	3,692	50.9%
Gastroenterology	2,733	3,432	3,578	3,486	27.6%	4,061	4,335	5,097	5,196	27.9%
Geriatric Medicine	336	433	456	544	61.9%	573	682	800	876	52.9%
Hematology-Oncology	12,531	12,630	10,888	10,456	-16.6%	17,445	21,964	19,899	19,093	9.4%

\*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Demand ► Specialty Care Stop Code Trends FY15-18, cont.

Specialty Title	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Infectious Disease	1,450	1,971	1,613	792	-45.4%	1,962	2,459	2,100	1,448	-26.2%
Internal Medicine	6,372	7,367	6,485	6,229	-2.2%	3,004	2,898	2,590	3,174	5.7%
Nephrology	3,586	3,706	3,727	3,665	2.2%	4,982	6,087	6,090	6,422	28.9%
Neurology	3,878	3,609	3,628	4,079	5.2%	6,107	6,168	7,350	9,049	48.2%
Nutrition	1,055	997	906	887	-15.9%	408	428	505	559	36.9%
Obstetrics & Gynecology	172	356	799	723	320.3%	331	708	1,528	1,209	264.7%
Ophthalmology	11,729	11,991	10,819	11,882	1.3%	18,643	18,172	14,193	15,692	-15.8%
Optometry	17,311	17,634	17,071	20,374	17.7%	21,360	24,294	22,909	25,114	17.6%
Orthopaedic Surgery	7,188	8,859	8,108	7,774	8.2%	5,678	7,393	8,361	9,514	67.6%
Otolaryngology	4,869	4,834	4,350	4,187	-14.0%	5,207	6,125	5,749	5,767	10.8%
Pain Medicine	4,030	5,340	9,604	10,367	157.2%	4,389	6,202	11,340	11,401	159.8%
Physical Medicine & Rehabilitation	12,500	13,896	12,347	12,107	-3.1%	14,105	16,271	14,902	15,829	12.2%
Plastic Surgery	1,903	2,164	2,467	2,164	13.7%	1,542	2,572	2,654	2,099	36.1%
Podiatry	3,296	4,402	4,760	4,217	27.9%	4,165	5,313	6,910	6,276	50.7%
Polytrauma	1,031	879	411	356	-65.5%	1,411	2,207	1,521	1,566	10.9%
Rheumatology	2,135	2,333	2,809	3,267	53.0%	2,734	2,998	4,051	5,003	83.0%
SCI	150	118	81	41	-72.7%	130	146	110	396	205.7%
Surgery	2,664	2,499	2,016	1,987	-25.4%	2,176	2,446	2,223	1,774	-18.5%
Thoracic Surgery	259	300	300	248	-4.2%	219	258	264	213	-2.6%
Urology	3,989	2,182	3,909	4,965	24.5%	4,412	2,056	4,348	5,325	20.7%
Vascular Surgery	855	1,177	1,484	1,653	93.3%	600	991	1,303	1,176	95.9%

\*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market

## Demand ► Specialty Care Stop Code Trends FY15-18, cont.

Specialty Title	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
(V10) (553GA) Yale	N/A	N/A	9	87	N/A	N/A	N/A	0	14	N/A
Dermatology	N/A	N/A	9	87	N/A	N/A	N/A	0	14	N/A
(V10) (553GB) Pontiac	4,012	4,532	4,804	4,617	15.1%	3,048	3,147	3,171	3,159	3.6%
Audiology & Speech Pathology	1,545	1,874	1,960	1,949	26.1%	910	934	833	779	-14.4%
Clinical Pharmacology	536	587	682	668	24.6%	0	0	2	2	N/A
Dermatology	81	123	113	53	-34.6%	13	25	5	10	-27.7%
Endocrinology	3	19	2	N/A	-100.0%	0	0	0	N/A	N/A
Physical Medicine & Rehabilitation	1,847	1,929	2,047	1,947	5.4%	2,125	2,188	2,331	2,369	11.5%
(V10) (655) Saginaw-Michigan	73,161	81,548	78,294	82,672	13.0%	75,793	80,815	74,445	80,673	6.4%
Audiology & Speech Pathology	8,503	11,427	10,718	11,609	36.5%	4,113	5,629	4,374	4,183	1.7%
Cardiology	3,538	4,515	4,752	4,874	37.8%	5,062	6,473	6,907	6,867	35.7%
Clinical Pharmacology	3,424	3,320	3,630	3,606	5.3%	5	5	14	12	130.4%
Critical Care / Pulmonary Disease	1,699	1,645	1,581	1,560	-8.2%	2,264	2,382	2,886	2,768	22.3%
Dermatology	293	494	530	547	86.7%	0	2	2	3	N/A
Endocrinology	320	628	525	374	16.9%	120	141	133	126	4.7%
Gastroenterology	3	23	17	23	666.7%	0	12	0	0	N/A
Geriatric Medicine	143	735	853	827	478.3%	252	1,273	1,547	1,494	492.2%
Hematology-Oncology	30	14	18	13	-56.7%	0	0	0	0	N/A
Infectious Disease	987	1,217	1,048	802	-18.7%	1,563	1,288	1,151	973	-37.8%
Internal Medicine	3,272	2,687	2,111	2,055	-37.2%	239	329	303	859	259.6%
Nephrology	969	1,103	1,189	136	-86.0%	1,411	1,790	2,038	202	-85.7%

\*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.EasternMichigan#3



## VISN 10: Eastern Michigan Market

## Demand ► Specialty Care Stop Code Trends FY15-18, cont.

Specialty Title	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Neurological Surgery	4	1	16	10	150.0%	0	0	0	0	N/A
Neurology	2,505	1,920	1,722	2,110	-15.8%	3,115	2,243	3,084	3,500	12.3%
Nutrition	1,457	1,605	1,637	1,270	-12.8%	6	192	213	81	1318.0%
Obstetrics & Gynecology	N/A	N/A	83	357	N/A	N/A	N/A	154	685	N/A
Optometry	18,743	19,703	18,561	20,737	10.6%	25,099	21,786	19,929	23,830	-5.1%
Orthopaedic Surgery	388	1	12	8	-97.9%	622	0	0	0	-100.0%
Otolaryngology	12	17	15	14	16.7%	0	0	0	0	N/A
Pain Medicine	132	710	1,312	1,038	686.4%	65	1,187	2,126	2,009	3012.8%
Physical Medicine & Rehabilitation	16,119	19,149	16,558	18,967	17.7%	21,231	25,345	18,075	21,526	1.4%
Podiatry	7,098	6,776	8,026	9,770	37.6%	6,836	6,459	7,791	9,174	34.2%
Polytrauma	176	96	71	65	-63.1%	253	207	122	152	-39.7%
Rheumatology	6	16	14	18	200.0%	0	0	0	0	N/A
SCI	43	5	9	43	0.0%	15	1	4	2	-87.5%
Surgery	443	462	431	98	-77.9%	336	417	345	69	-79.5%
Urology	2,854	3,279	2,855	1,741	-39.0%	3,187	3,654	3,247	2,158	-32.3%
(V10) (655GA) Gaylord - (V10) MichErie	1,389	1,648	1,570	1,504	8.3%	26	70	147	117	341.1%
Audiology & Speech Pathology	110	196	126	161	46.4%	0	0	0	0	N/A
Cardiology	10	18	18	16	60.0%	4	6	8	2	-41.1%
Clinical Pharmacology	914	817	735	720	-21.2%	1	2	1	0	-100.0%
Dermatology	143	174	156	171	19.6%	0	0	0	0	N/A
Infectious Disease	N/A	3	5	16	N/A	N/A	0	0	1	N/A

\*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.EasternMichigan#4



## VISN 10: Eastern Michigan Market

## Demand ► Specialty Care Stop Code Trends FY15-18, cont.

Specialty Title	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Nutrition	78	80	57	55	-29.5%	0	0	1	1	N/A
Podiatry	134	360	473	365	172.4%	21	61	138	113	429.3%
(V10) (655GB) Traverse City - (V10) MichErie	2,617	1,755	624	796	-69.6%	3,961	2,506	14	14	-99.6%
Audiology & Speech Pathology	N/A	N/A	17	109	N/A	N/A	N/A	0	0	N/A
Cardiology	12	16	22	27	125.0%	4	6	8	13	219.8%
Clinical Pharmacology	N/A	N/A	283	317	N/A	N/A	N/A	2	0	N/A
Critical Care / Pulmonary Disease	16	13	15	13	-18.8%	12	1	1	0	-98.6%
Dermatology	159	144	173	241	51.6%	2	2	0	0	-88.1%
Endocrinology	15	33	30	N/A	-100.0%	2	0	2	N/A	-100.0%
Nutrition	74	47	48	48	-35.1%	0	0	0	1	55.9%
Pain Medicine	10	25	20	34	240.0%	0	0	0	0	N/A
Physical Medicine & Rehabilitation	2,330	1,472	N/A	N/A	-100.0%	3,941	2,497	N/A	N/A	-100.0%
Urology	1	5	16	7	600.0%	0	0	0	0	N/A
(V10) (655GC) Oscoda	1,184	1,190	1,283	1,449	22.4%	214	144	275	373	74.2%
Audiology & Speech Pathology	N/A	26	77	79	N/A	N/A	0	1	0	N/A
Cardiology	20	21	23	16	-20.0%	5	3	4	2	-58.5%
Clinical Pharmacology	428	378	361	332	-22.4%	0	1	2	1	277.8%
Dermatology	61	64	73	109	78.7%	0	0	0	14	N/A
Endocrinology	6	24	25	1	-83.3%	3	1	2	0	-100.0%
Infectious Disease	N/A	4	17	12	N/A	N/A	0	2	0	N/A
Nutrition	35	25	38	38	8.6%	0	0	0	0	N/A

\*Specialties were only included if there were greater than 15 encounters in any of the past four years.

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Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.EasternMichigan#5



## VISN 10: Eastern Michigan Market

## Demand ► Specialty Care Stop Code Trends FY15-18, cont.

Specialty Title	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Podiatry	634	648	669	862	36.0%	206	139	264	356	72.7%
(V10) (655GD) Alpena	2,799	2,954	3,202	3,591	28.3%	3,891	3,172	2,720	3,001	-22.9%
Audiology & Speech Pathology	9	159	118	145	1511.1%	0	0	0	0	N/A
Cardiology	13	14	16	16	23.1%	3	2	5	2	-19.8%
Clinical Pharmacology	287	245	251	278	-3.1%	2	2	2	0	-77.8%
Dermatology	84	168	94	132	57.1%	0	0	0	0	N/A
Nutrition	95	128	164	118	24.2%	0	0	1	0	N/A
Physical Medicine & Rehabilitation	2,293	1,983	2,019	2,191	-4.4%	3,879	3,120	2,495	2,725	-29.8%
Podiatry	18	257	540	711	3850.0%	8	48	217	273	3513.5%
(V10) (655GE) Clare	4,224	3,643	2,639	4,488	6.3%	3,923	2,896	1,033	3,949	0.7%
Cardiology	30	49	35	38	26.7%	7	11	7	9	26.6%
Clinical Pharmacology	822	856	868	765	-6.9%	2	1	6	0	-91.5%
Dermatology	180	151	127	132	-26.7%	0	0	0	0	166.7%
Endocrinology	65	71	50	24	-63.1%	10	0	4	5	-52.5%
Internal Medicine	415	521	671	607	46.3%	3	119	220	601	18398.8%
Nutrition	369	364	381	402	8.9%	26	48	63	60	129.7%
Pain Medicine	8	N/A	N/A	21	162.5%	0	N/A	N/A	1	N/A
Physical Medicine & Rehabilitation	2,335	1,631	507	2,499	7.0%	3,873	2,717	734	3,273	-15.5%
(V10) (655GF) Bad Axe	2,695	2,965	2,689	2,906	7.8%	2,781	3,516	2,693	2,756	-0.9%
Audiology & Speech Pathology	N/A	67	88	71	N/A	N/A	1	0	0	N/A
Cardiology	10	17	14	12	20.0%	2	3	3	2	23.4%

\*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.EasternMichigan#6



## VISN 10: Eastern Michigan Market

## Demand ► Specialty Care Stop Code Trends FY15-18, cont.

	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
Specialty Title	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Clinical Pharmacology	199	197	205	236	18.6%	1	0	0	0	-100.0%
Dermatology	27	36	80	103	281.5%	0	0	0	0	N/A
Endocrinology	3	14	27	N/A	-100.0%	0	1	3	N/A	N/A
Nutrition	136	97	133	130	-4.4%	0	15	33	11	2983.3%
Physical Medicine & Rehabilitation	2,320	2,537	2,142	2,354	1.5%	2,778	3,496	2,654	2,743	-1.3%
(V10) (655GG) Cadillac - (V10) MichErie	3,212	3,907	5,112	5,220	62.5%	1,198	1,308	1,952	1,850	54.4%
Audiology & Speech Pathology	2,688	3,366	4,149	4,021	49.6%	1,189	1,297	1,689	1,516	27.4%
Cardiology	13	14	15	20	53.8%	7	3	4	4	-40.4%
Clinical Pharmacology	300	305	374	344	14.7%	0	0	1	2	388.6%
Dermatology	103	78	55	80	-22.3%	0	0	0	0	N/A
Endocrinology	7	16	23	32	357.1%	2	0	2	3	85.7%
Infectious Disease	N/A	6	3	22	N/A	N/A	0	0	3	N/A
Nutrition	84	86	90	65	-22.6%	0	0	0	0	N/A
Podiatry	17	36	403	636	3641.2%	0	9	255	322	N/A
(V10) (655GH) Cheboygan County - (V10) MichErie	341	348	466	520	52.5%	11	8	10	12	5.7%
Audiology & Speech Pathology	N/A	N/A	101	105	N/A	N/A	N/A	0	0	N/A
Cardiology	20	27	18	17	-15.0%	6	8	6	11	98.2%
Clinical Pharmacology	134	142	180	250	86.6%	5	0	1	0	-96.2%
Dermatology	20	26	52	72	260.0%	0	0	1	0	166.7%
Endocrinology	5	6	19	N/A	-100.0%	1	1	2	N/A	-100.0%
Nutrition	160	94	85	57	-64.4%	0	0	0	0	-100.0%

\*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.EasternMichigan#7





## VISN 10: Eastern Michigan Market

## Demand ► Specialty Care Stop Code Trends FY15-18, cont.

Specialty Title	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Pain Medicine	2	53	11	19	850.0%	0	0	0	0	N/A
(V10) (655GI) Grayling - (V10) MichErie	963	1,017	910	830	-13.8%	152	76	79	65	-57.2%
Audiology & Speech Pathology	4	147	76	88	2100.0%	1	1	0	0	-83.0%
Cardiology	7	22	17	8	14.3%	2	4	5	2	0.0%
Clinical Pharmacology	339	381	360	340	0.3%	0	0	0	0	-100.0%
Dermatology	47	54	83	61	29.8%	0	0	0	0	N/A
Endocrinology	5	N/A	17	N/A	-100.0%	2	N/A	0	N/A	-100.0%
Infectious Disease	N/A	10	25	16	N/A	N/A	0	1	0	N/A
Nutrition	70	93	91	74	5.7%	0	0	0	0	N/A
Pain Medicine	N/A	2	2	36	N/A	N/A	0	0	0	N/A
Podiatry	491	308	239	207	-57.8%	147	71	73	63	-57.0%
(V10) (655QA) Saginaw-Barnard Road	N/A	N/A	238	354	N/A	N/A	N/A	295	395	N/A
Physical Medicine & Rehabilitation	N/A	N/A	238	354	N/A	N/A	N/A	295	395	N/A
(V10) (655QB) Grand Traverse - (V10) MichErie	N/A	882	1,578	2,422	N/A	N/A	1,528	2,106	3,091	N/A
Physical Medicine & Rehabilitation	N/A	882	1,578	2,422	N/A	N/A	1,528	2,106	3,091	N/A

\*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.EasternMichigan#8



VISN 10: Eastern Michigan Market

Demand ► Specialty Care Stop Code Trends FY15-18 – Dental

Dental*	Visits				4 Yr. Ch.	RVU Equivalent				4 Yr. Ch.
Facility	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
(V10) (553) Detroit	12,055	12,982	13,129	12,933	7.3%	913,535	960,446	974,233	921,006	0.8%
(V10) (655) Saginaw	8,209	7,972	8,762	10,334	25.9%	636,148	662,542	690,774	892,001	40.2%

\*Dental Data is derived from the Office of Dentistry’s dataset and represents Visits, RVU Equivalents, and Unique Patients.



## VISN 10: Eastern Michigan Market — Detroit-Michigan

Demand ► **Telehealth — FY18 Telehealth Utilization**

Telehealth Utilization	Detroit-Michigan	National
Telehealth Use (Tele1)	16.3%	13.1%
Home Telehealth (Tele2)	1.4%	2.3%
Clinical Video Telehealth (Tele3)	3.2%	6.6%
Store and Forward Telehealth (Tele4)	12.0%	5.3%
eConsult (SC10)	5.8%	8.3%
Video Telehealth to Off Site Patients (Tele9)	0.0%	0.5%

Note: Telehealth utilization is based on percentage of unique patients leveraging telehealth-related tools/technology.

Source: VSSC Telehealth Dashboard - Connected Care

2.15.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

Demand ► **Telehealth — FY18 Telehealth Utilization**

Telehealth Utilization	Saginaw-Michigan	National
Telehealth Use (Tele1)	22.7%	13.1%
Home Telehealth (Tele2)	3.0%	2.3%
Clinical Video Telehealth (Tele3)	15.5%	6.6%
Store and Forward Telehealth (Tele4)	6.9%	5.3%
eConsult (SC10)	1.8%	8.3%
Video Telehealth to Off Site Patients (Tele9)	0.3%	0.5%

Note: Telehealth utilization is based on percentage of unique patients leveraging telehealth-related tools/technology.

Source: VSSC Telehealth Dashboard - Connected Care

2.15.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► Telehealth Encounters by Patient and Provider Site\* — Detroit-Michigan

Patient Site	FY15	FY16	FY17	FY18	4 Yr Avg
(V10) (553) Detroit-Michigan	534	754	936	598	705
(V10) (553GA) Yale	1,181	1,187	1,220	1,475	1,265
(V10) (553GB) Pontiac	3,072	3,506	3,545	3,237	3,340
<b>Total</b>	<b>4,787</b>	<b>5,447</b>	<b>5,701</b>	<b>5,310</b>	<b>5,311</b>

## Detroit-Michigan VAMC &amp; Treating Facility Encounters by Provider Site

Provider Site	FY15-18 Total Encounters	% of Total Encounters
(V10) (553) Detroit-Michigan	21,058	99.1%
(V10) (553GB) Pontiac	137	0.6%
(V10) (506) Ann Arbor-Michigan	35	0.2%
(V10) (553GA) Yale	14	0.1%
(V10) (541) Cleveland-Ohio	1	0.0%

Note: Patient site indicates the clinic location by primary stop code where the patient receives the service

\*Includes 4 Types: CVT General (690/692,693,699), CVT NationalCenter (644/645), CVT ProviderToHomePatient (179), and SF General (694/695,696)

Source: FY15-18 Detailed Telehealth Workload by Patient Site, Provider Site, Stop Codes, and Telehealth Type Report



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► Telehealth Encounters by Specialty\*

	Specialties	FY15	FY16	FY17	FY18	4 Yr Avg
Detroit-Michigan	Pain Medicine	10	4	3	N/A	4
	Ophthalmology	233	261	678	952	531
	Nutrition	1,073	1,305	1,339	1,241	1,240
	Mental Health	2,397	2,451	2,373	1,956	2,294
	Endocrinology	3	19	2	N/A	6
	Dermatology	488	743	552	352	534
	Critical Care / Pulmonary Disease	34	48	37	58	44
	Clinical Pharmacology	527	599	682	671	620
	All Other Specialties	22	17	35	80	39
	<b>Total</b>	<b>4,787</b>	<b>5,447</b>	<b>5,701</b>	<b>5,310</b>	<b>5,311</b>

\*Includes 4 Types: CVT General (690/692,693,699), CVT NationalCenter (644/645), CVT ProviderToHomePatient (179), and SF General (694/695,696)

Source: FY15-18 Detailed Telehealth Workload by Patient Site, Provider Site, Stop Codes, and Telehealth Type Report



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ▶ Telehealth Encounters by Patient and Provider Site\* — Saginaw-Michigan

Patient Site	FY15	FY16	FY17	FY18	4 Yr Avg
(V10) (655) Saginaw-Michigan	1,931	2,365	1,564	1,359	1,804
(V10) (655GA) Gaylord - (V10) MichErie	2,588	2,605	2,387	2,541	2,530
(V10) (655GB) Traverse City - (V10) MichE...	996	903	1,320	1,321	1,135
(V10) (655GC) Oscoda	1,304	1,358	1,247	1,366	1,318
(V10) (655GD) Alpena	1,544	1,646	1,691	1,864	1,686
(V10) (655GE) Clare	3,080	3,329	3,189	3,060	3,164
(V10) (655GF) Bad Axe	836	900	1,159	1,337	1,058
(V10) (655GG) Cadillac - (V10) MichErie	1,050	1,218	1,413	2,051	1,433
(V10) (655GH) Cheboygan County - (V10) ...	488	718	755	981	735
(V10) (655GI) Grayling - (V10) MichErie	1,075	1,468	1,555	1,615	1,428
(V10) (655QA) Saginaw-Barnard Road			1,347	3,351	2,349
(V10) (655QB) Grand Traverse - (V10) Mic...		98	270	280	216
<b>Total</b>	<b>14,892</b>	<b>16,608</b>	<b>17,897</b>	<b>21,126</b>	<b>17,630</b>

## Saginaw-Michigan VAMC &amp; Treating Facility Encounters by Provider Site

Provider Site	FY15-18 Total Encounters	% of Total Encounters
(V10) (655) Saginaw-Michigan	30,983	32.8%
(V10) (655QB) Grand Traverse	9,486	10.1%
(V10) (655QB) Grand Traverse - (V10...	9,486	10.1%
(V10) (655GB) Traverse City	6,728	7.1%
(V10) (655GB) Traverse City - (V10) ...	6,728	7.1%
(V10) (655QA) Saginaw-Barnard Road	5,571	5.9%
(V10) (655GH) Cheboygan County	5,188	5.5%
(V10) (655GH) Cheboygan County - (...)	5,188	5.5%
(V10) (506) Ann Arbor-Michigan	4,997	5.3%
(V10) (655GE) Clare	2,067	2.2%
(V10) (655GG) Cadillac	1,668	1.8%
(V10) (655GG) Cadillac - (V10) Mich...	1,668	1.8%
(V10) (553) Detroit-Michigan	1,277	1.4%
(V10) (655GA) Gaylord	737	0.8%
(V10) (655GA) Gaylord - (V10) Mich...	737	0.8%
(V10) (506QB) Green Road	609	0.6%
(V12) (550) Danville-Illinois	345	0.4%
(V01) (689A4) Newington	332	0.4%
(V01) (689GC) Willimantic	146	0.2%
(V04) (642) Philadelphia-Pennsylvania	128	0.1%
(V01) (689) West Haven	68	0.1%
(V10) (655GD) Alpena	61	0.1%
(V10) (655GC) Oscoda	32	0.0%
(V10) (655GF) Bad Axe	29	0.0%
(V19) (660) Salt Lake City	24	0.0%
(V10) (655GI) Grayling	20	0.0%
(V10) (655GI) Grayling - (V10) MichE...	20	0.0%
(V06) (652) Richmond-Virginia	15	0.0%
(V21) (662) San Francisco-California	6	0.0%
(V12) (537) Chicago-Illinois	4	0.0%
(V10) (583) Indianapolis-Indiana	1	0.0%
(V12) (578) Hines	1	0.0%

Note: Patient site indicates the clinic location by primary stop code where the patient receives the service

\*Includes 4 Types: CVT General (690/692,693,699), CVT NationalCenter (644/645), CVT ProviderToHomePatient (179), and SF General (694/695,696)

Source: FY15-18 Detailed Telehealth Workload by Patient Site, Provider Site, Stop Codes, and Telehealth Type Report



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Telehealth Encounters by Specialty\*

	Specialties	FY15	FY16	FY17	FY18	4 Yr Avg
Saginaw-Michigan	Physical Medicine & Rehabilitation	N/A	N/A	2	1	1
	Pain Medicine	91	162	65	146	116
	Ophthalmology	316	261	389	986	488
	Nutrition	2,372	2,618	2,447	2,487	2,481
	Mental Health	6,305	6,906	7,544	9,764	7,630
	Endocrinology	130	181	212	134	164
	Dermatology	1,122	1,395	1,428	1,649	1,399
	Critical Care / Pulmonary Disease	16	34	39	43	33
	Clinical Pharmacology	4,011	4,060	4,479	4,585	4,284
	All Other Specialties	529	991	1,292	1,279	1,023
	<b>Total</b>	<b>14,892</b>	<b>16,608</b>	<b>17,897</b>	<b>21,074</b>	<b>17,618</b>

\*Includes 4 Types: CVT General (690/692,693,699), CVT NationalCenter (644/645), CVT ProviderToHomePatient (179), and SF General (694/695,696)

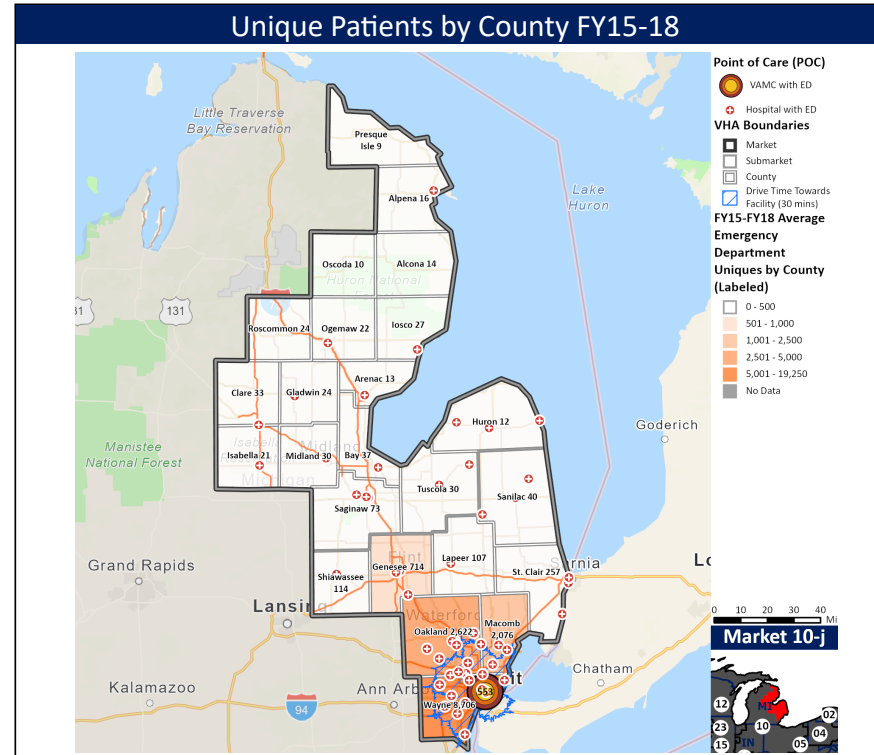
Source: FY15-18 Detailed Telehealth Workload by Patient Site, Provider Site, Stop Codes, and Telehealth Type Report





## VISN 10: Eastern Michigan Market

## Demand ► Emergency Department Uniques (FY15-18)



Note: Map shows acute and critical access hospitals with Emergency Departments and does not include freestanding Emergency Departments

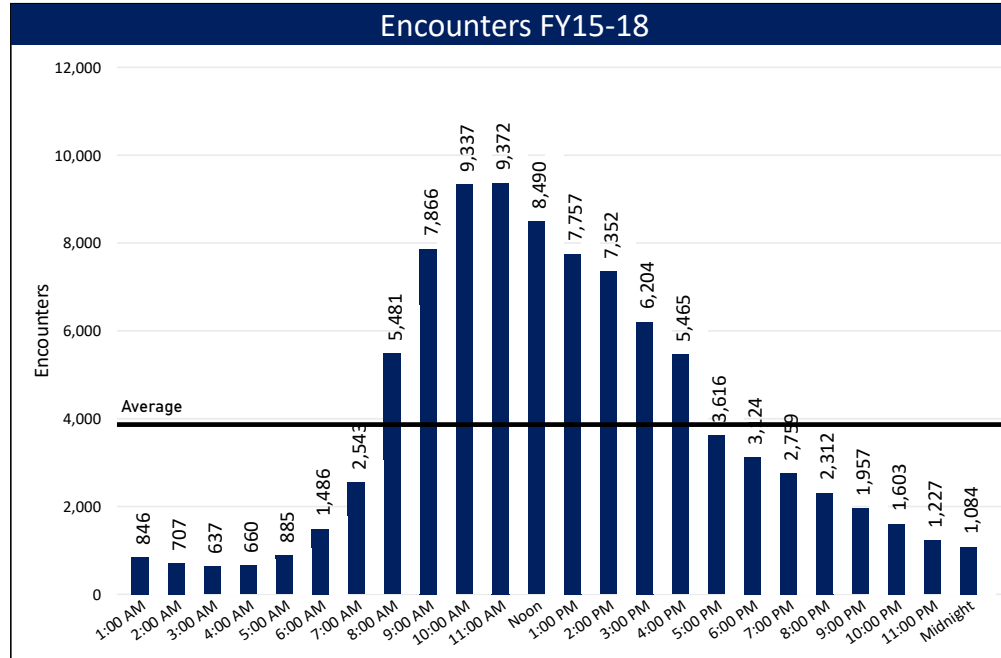
Source: HRSA Data Warehouse

2.28.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► Emergency Department Encounters FY15-FY18 — Detroit-Michigan VAMC



89.1% of encounters seen between FY15-FY18 occurred between 8 A.M. and 10 P.M.

83.0% of encounters seen between FY15-18 occurred on weekdays vs. weekends

	CPT Code	FY15	FY16	FY17	FY18
Encounters	99281	3,175	5,625	2,782	917
	99282	11,140	7,145	8,274	5,083
	99283	6,604	6,965	7,408	7,150
	99284	1,669	2,659	3,721	4,736
	99285	498	485	619	3,956
Total Encounters	Total	23,086	22,879	22,804	21,842
VA Admissions %	Total	9.4%	11.9%	15.5%	14.8%
% Transfers	Total	0.7%	0.8%	1.2%	1.7%



## VISN 10: Eastern Michigan Market

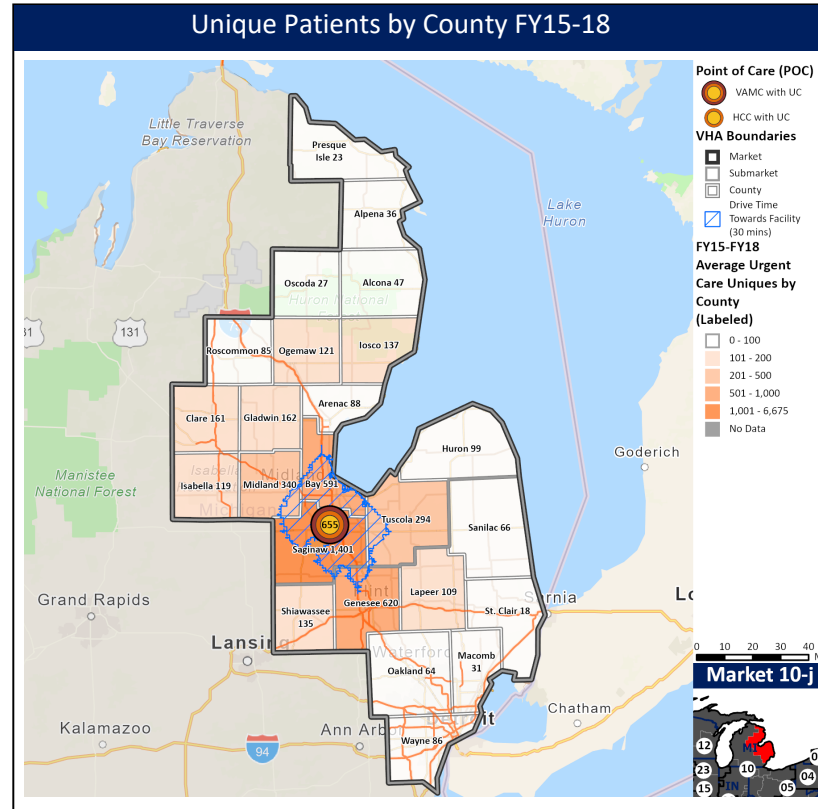
## Demand ► Emergency Department Operations

	Measure	FY17	FY18	FY17 National	FY18 National
Detroit-Michigan	ED Door to Inpatient Floor (Min)	305	374	312	316
	ED Admit Delay (Min)	121	174	126	129
	ED % Boarded > 4 Hrs	11.8%	25.1%	15.2%	16.2%
	Diversion Total Hours	N/A	786	N/A	262,871
Saginaw-Michigan	ED Door to Inpatient Floor (Min)	227	241	312	316
	ED Admit Delay (Min)	53	49	126	129
	ED % Boarded > 4 Hrs	0.3%	0.2%	15.2%	16.2%
	Diversion Total Hours	N/A	2	N/A	262,871



VISN 10: Eastern Michigan Market

Demand ► Urgent Care Uniques (FY15-18)



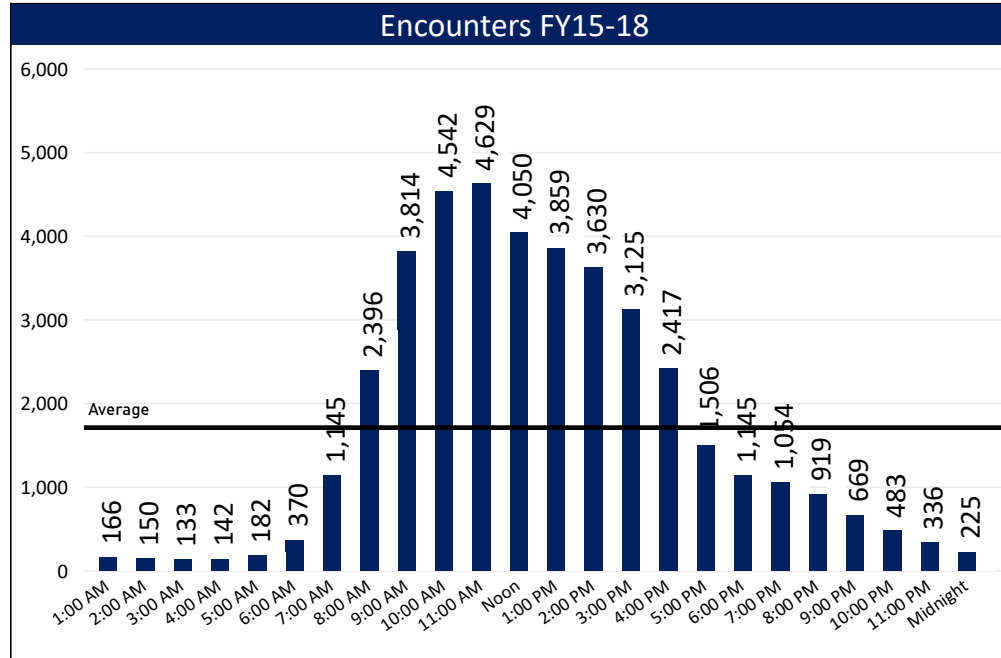
Source: HRSA Data Warehouse

2.27.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Urgent Care Encounters (FY15-18) – Saginaw-Michigan VAMC



93.1% of encounters seen between FY15-18 occurred between 8 A.M. and 10 P.M

86.5% of encounters seen between FY15-18 occurred on weekdays vs. weekends

Encounters				
CPT Code	FY15	FY16	FY17	FY18
99201	32	26	28	66
99202	57	115	76	147
99203	341	284	183	171
99204	86	71	29	76
99205	10	1	5	4
99211	2,363	2,355	3,517	1,277
99212	1,135	1,146	1,010	1,876
99213	2,485	3,005	3,863	3,706
99214	3,111	3,093	2,449	2,050
99215	176	77	50	164
<b>Total</b>	<b>9,796</b>	<b>10,173</b>	<b>11,210</b>	<b>9,537</b>

CPT codes filtered by Stop Code 131 Urgent Care Clinic



## VISN 10: Eastern Michigan Market

## Demand ► Non-VA Community Care (NVCC) FY16-18 – Outpatient CPT Authorizations

Sector/County Name			Primary Care			Mental Health			Medicine			Surgery			Rehab Medicine		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
10-j-1-A	Alcona, MI	626	N/A	N/A	N/A	N/A	N/A	N/A	20	33	79	22	26	73	7	5	12
10-j-1-A	Alpena, MI	1,277	1	N/A	N/A	1	N/A	2	55	64	240	42	56	181	30	10	19
10-j-1-A	Iosco, MI	1,379	N/A	N/A	N/A	2	2	N/A	51	49	151	46	47	144	15	22	49
10-j-1-A	Oscoda, MI	350	1	2	3	N/A	N/A	N/A	17	25	78	19	15	65	22	21	25
10-j-1-A	Presque Isle, MI	684	N/A	2	2	2	1	1	18	37	119	37	45	91	12	24	35
	<b>Sector Subtotal</b>	<b>4,316</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>161</b>	<b>208</b>	<b>667</b>	<b>166</b>	<b>189</b>	<b>554</b>	<b>86</b>	<b>82</b>	<b>140</b>
10-j-1-B	Clare, MI	1,397	2	N/A	N/A	2	1	5	34	40	126	46	48	160	25	44	29
10-j-1-B	Gladwin, MI	1,102	2	2	6	1	N/A	N/A	36	51	144	40	42	125	14	32	17
10-j-1-B	Isabella, MI	1,143	1	N/A	N/A	N/A	1	3	16	35	113	41	50	94	21	27	31
10-j-1-B	Roscommon, MI	1,208	N/A	N/A	1	N/A	N/A	1	45	52	168	37	43	171	27	35	69
	<b>Sector Subtotal</b>	<b>4,850</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>9</b>	<b>131</b>	<b>178</b>	<b>551</b>	<b>164</b>	<b>183</b>	<b>550</b>	<b>87</b>	<b>138</b>	<b>146</b>
10-j-1-C	Arenac, MI	641	2	1	5	N/A	N/A	N/A	22	30	79	17	28	85	6	10	25
10-j-1-C	Bay, MI	3,259	1	N/A	N/A	1	2	5	57	116	324	85	97	317	17	23	28
10-j-1-C	Midland, MI	2,188	N/A	N/A	1	2	N/A	3	46	82	243	57	80	245	25	41	34
10-j-1-C	Ogemaw, MI	888	3	3	16	1	1	1	48	75	143	41	56	158	34	45	94
	<b>Sector Subtotal</b>	<b>6,976</b>	<b>6</b>	<b>4</b>	<b>22</b>	<b>4</b>	<b>3</b>	<b>9</b>	<b>173</b>	<b>303</b>	<b>789</b>	<b>200</b>	<b>261</b>	<b>805</b>	<b>82</b>	<b>119</b>	<b>181</b>
10-j-1-D	Huron, MI	1,038	1	N/A	N/A	1	3	1	20	29	121	25	39	116	6	4	5
10-j-1-D	Saginaw, MI	5,674	2	N/A	N/A	11	9	9	137	232	635	151	173	542	29	27	25
10-j-1-D	Tuscola, MI	1,744	N/A	N/A	2	N/A	N/A	1	31	58	197	30	47	145	10	12	24
	<b>Sector Subtotal</b>	<b>8,456</b>	<b>3</b>	<b>N/A</b>	<b>2</b>	<b>12</b>	<b>12</b>	<b>11</b>	<b>188</b>	<b>319</b>	<b>953</b>	<b>206</b>	<b>259</b>	<b>803</b>	<b>45</b>	<b>43</b>	<b>54</b>
10-j-2-A	Genesee, MI	8,816	3	1	1	8	8	2	183	224	574	149	118	296	249	172	187
10-j-2-A	Lapeer, MI	2,053	2	1	1	N/A	3	8	42	60	160	33	34	84	47	54	86
10-j-2-A	Shiawassee, MI	1,820	1	1	7	1	2	2	49	59	153	41	32	90	68	51	50
	<b>Sector Subtotal</b>	<b>12,689</b>	<b>6</b>	<b>3</b>	<b>9</b>	<b>9</b>	<b>13</b>	<b>12</b>	<b>274</b>	<b>343</b>	<b>887</b>	<b>223</b>	<b>184</b>	<b>470</b>	<b>364</b>	<b>277</b>	<b>323</b>
10-j-2-B	Saint Clair, MI	4,709	8	15	79	3	26	90	121	244	921	100	192	584	84	113	254
10-j-2-B	Sanilac, MI	1,363	2	4	11	2	2	8	44	72	230	31	35	149	25	28	79

Source: VHA Office of Community Care

2.30.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

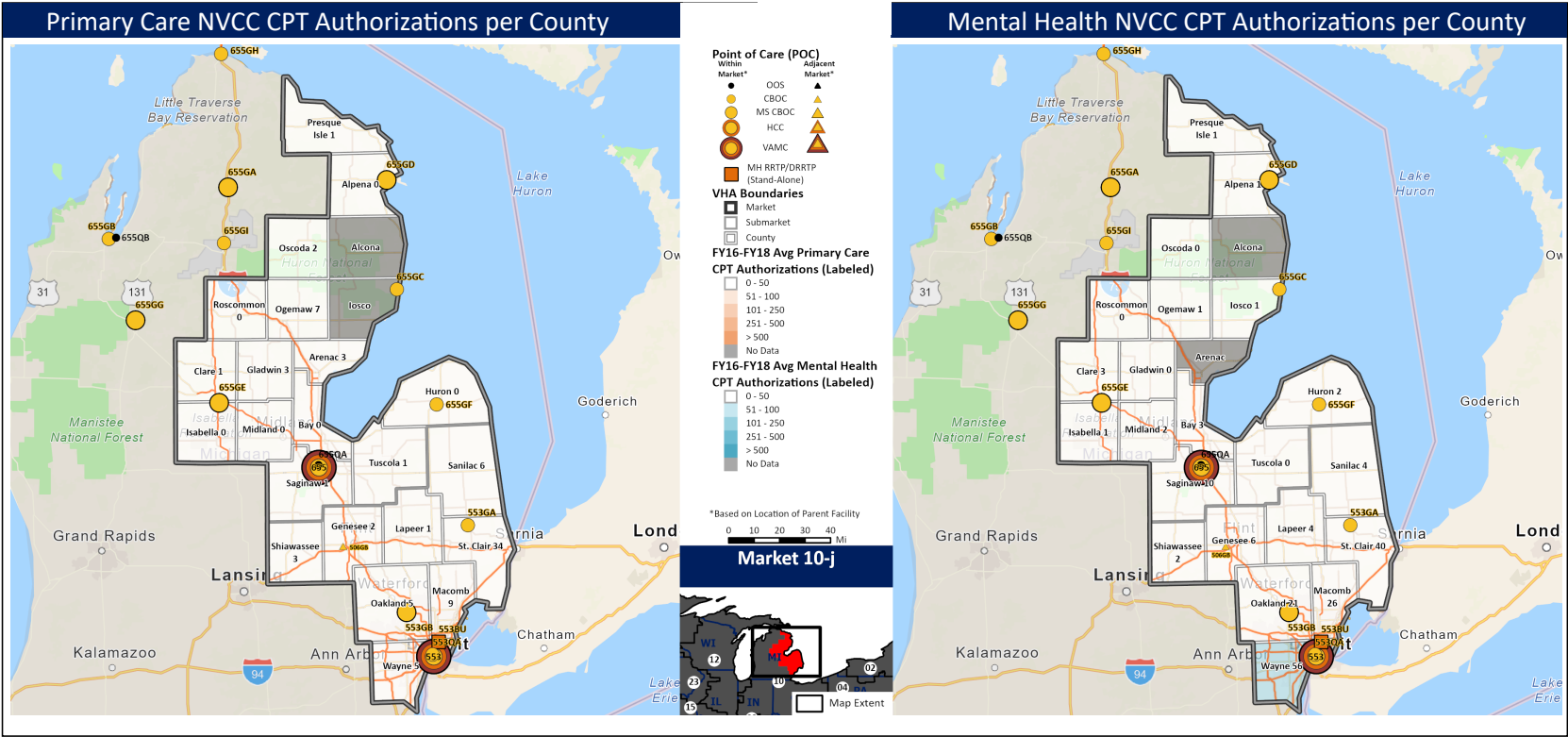
## Demand ► Non-VA Community Care (NVCC) FY16-18 – Outpatient CPT Authorizations, cont.

Sector/County Name			Primary Care			Mental Health			Medicine			Surgery			Rehab Medicine		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
	Sector Subtotal	6,072	10	19	90	5	28	98	165	316	1,151	131	227	733	109	141	333
10-j-2-C	Oakland, MI	18,090	9	N/A	6	10	12	41	392	365	761	312	219	410	125	87	130
	Sector Subtotal	18,090	9	N/A	6	10	12	41	392	365	761	312	219	410	125	87	130
10-j-2-D	Macomb, MI	15,662	9	3	15	11	21	45	302	342	674	293	229	425	101	94	127
	Sector Subtotal	15,662	9	3	15	11	21	45	302	342	674	293	229	425	101	94	127
10-j-2-E	Wayne, MI	35,426	3	1	12	36	42	89	810	823	1,456	627	441	857	123	80	162
	Sector Subtotal	35,426	3	1	12	36	42	89	810	823	1,456	627	441	857	123	80	162
	Market Total	112,537	53	36	168	95	136	317	2,596	3,197	7,889	2,322	2,192	5,607	1,122	1,061	1,596



VISN 10: Eastern Michigan Market

Demand ▶ NVCC Outpatient CPT Authorizations (Primary Care and Mental Health)



Source: VHA Office of Community Care

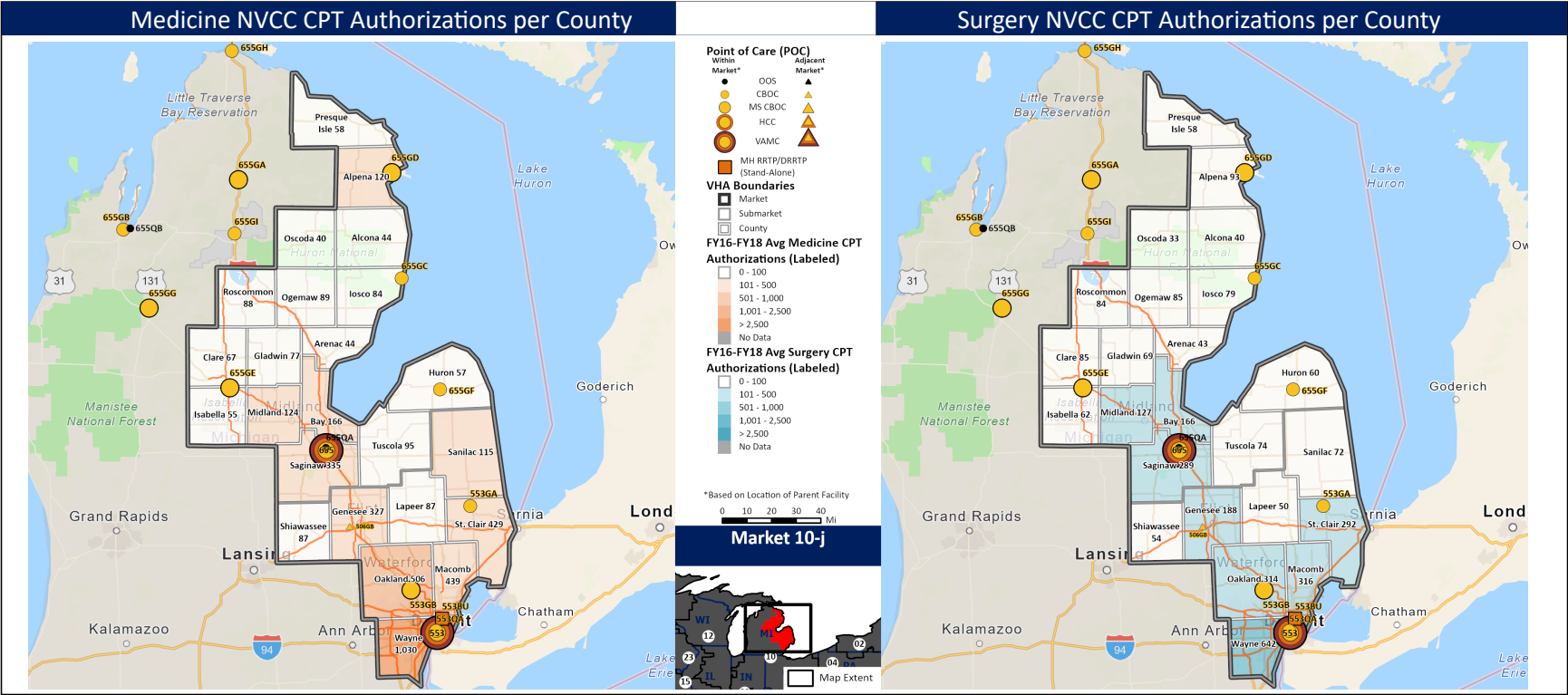
2.32.V10.EasternMichigan





VISN 10: Eastern Michigan Market

Demand ► NVCC Outpatient CPT Authorizations (Medicine and Surgery)



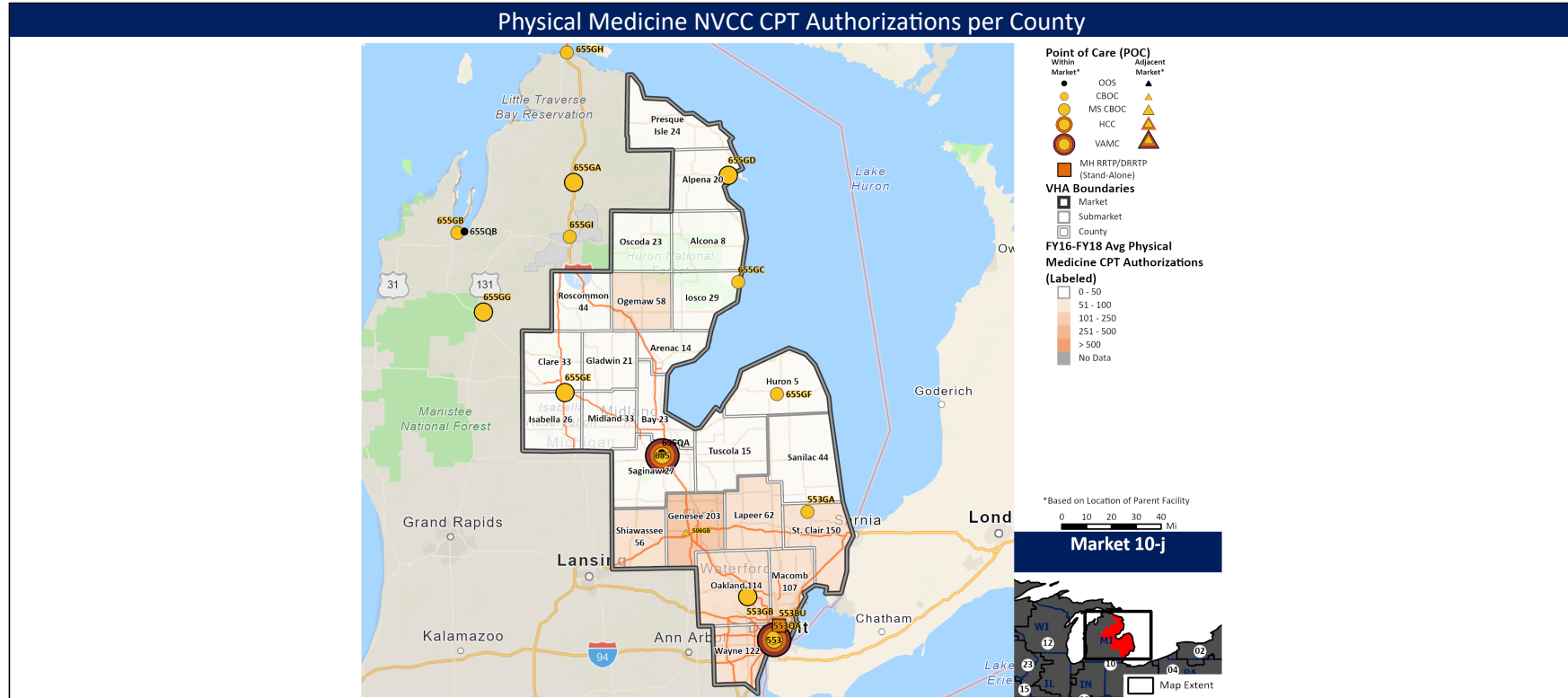
Source: VHA Office of Community Care

2.33.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Demand ► NVCC Outpatient CPT Authorizations (Physical Medicine)



Source: VHA Office of Community Care

2.34.V10.EasternMichigan



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► Top Services Provided by NVCC for Detroit-Michigan

Commercial*			
	FY16	FY17	FY18
Category of Care	Total Authorizations	Total Authorizations	Total Authorizations
NIC HOMEMAKER/HOME HEALTH AID	1,116	1,109	1,143
Inpatient	336	458	893
RADIOLOGY MAMMOGRAM	2	33	807
ER VISIT/URGENT CARE	91	276	549
NIC SKILLED HOME CARE	156	314	321
CARDIOLOGY TESTS, PROCEDURES, STUDIES	145	268	233
HEMATOLOGY/ONCOLOGY	4	43	178
NIC SKILLED NURSING	207	57	147
DIALYSIS	74	110	118
RADIOLOGY ULTRASOUND	9	7	101
NIC RESPITE CARE	75	105	83
OPHTHALMOLOGY	180	102	71
GASTROENTEROLOGY TESTS, PROCEDURES, STUDIES	21	41	62
OPHTHALMOLOGY TESTS, PROCEDURES, STUDIES	57	42	53
CARDIOLOGY IMAGING	2	N/A	42
UROLOGY	154	85	34
MENTAL HEALTH	45	35	29
CHIROPRACTIC	55	26	29
OBSTETRICS	31	15	27
ORTHOPEDIC TESTS, PROCEDURES, STUDIES	33	33	26
CARDIOLOGY STRESS TEST	1	2	26
ORTHOPEDIC	45	38	26
DERMATOLOGY	20	16	25
NEUROSURGERY	12	16	24
RADIOLOGY MRI/MRA	26	17	23
Other	1,013	486	363
Total	3,910	3,734	5,433

\*Commercial includes authorizations from federally qualified health centers and provider agreements

Source: VHA Office of Community Care

2.26.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Top Services Provided by NVCC for Saginaw-Michigan

Commercial*			
	FY16	FY17	FY18
Category of Care	Total Authorizations	Total Authorizations	Total Authorizations
RADIOLOGY NOS	1,665	2,165	2,970
Inpatient	931	1,190	1,622
ER VISIT/URGENT CARE	1,878	1,566	1,598
NIC HOMEMAKER/HOME HEALTH AID	993	1,174	1,064
ORTHOPEDIC	20	101	822
UROLOGY	4	18	765
PAIN MANAGEMENT	103	163	641
RADIOLOGY MAMMOGRAM	224	133	636
PHYSICAL THERAPY	52	12	619
HEMATOLOGY/ONCOLOGY	87	158	565
OPHTHALMOLOGY	3	38	542
RADIOLOGY MRI/MRA	86	122	504
CHIROPRACTIC	42	9	475
CARDIOLOGY TESTS, PROCEDURES, STUDIES	5	78	401
GASTROENTEROLOGY TESTS, PROCEDURES, STUDIES	17	109	395
COLONOSCOPY	55	74	374
NEUROSURGERY	8	86	357
DERMATOLOGY TESTS, PROCEDURES, STUDIES	20	29	331
RADIOLOGY CT SCAN	35	48	312
RADIOLOGY ULTRASOUND	87	132	287
SURGERY GENERAL	42	69	262
NEPHROLOGY	1	24	205
RADIATION THERAPY	40	45	197
ENT	3	21	193
PODIATRY	11	12	176
Other	2,388	1,401	2,286
<b>Total</b>	<b>8,800</b>	<b>8,977</b>	<b>18,599</b>

\*Commercial includes authorizations from federally qualified health centers and provider agreements

Source: VHA Office of Community Care

2.26.V10.EasternMichigan.655



**Demand** ► **Estimated Future Market Demand — Outpatient**

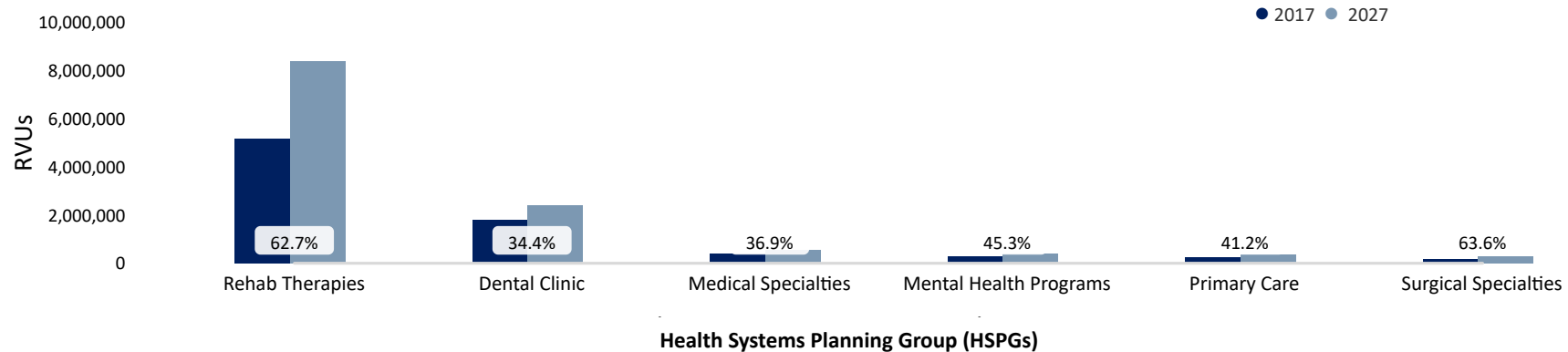


## VISN 10: Eastern Michigan Market

Demand ► **BY17 Market Utilization Projections (Outpatient) — Eastern Michigan Market**

BY17 VISN 10: Eastern Michigan Market Utilization Projections (RVUs)

	FY17			FY22	FY27	10 Year Change in Total	10 Year % Change in Total
	In-House	Community	Total	Total	Total		
Rehab Therapies	4,188,819	962,953	5,151,772	6,954,718	8,383,192	3,231,420	+62.7%
Dental Clinic	1,611,573	173,697	1,785,270	2,253,547	2,398,855	613,585	+34.4%
Medical Specialties	360,561	46,230	406,791	504,549	556,859	150,069	+36.9%
Mental Health Programs	282,139	2,844	284,983	358,068	414,130	129,147	+45.3%
Primary Care	236,246	11,308	247,554	308,051	349,517	101,963	+41.2%
Surgical Specialties	137,332	34,268	171,599	237,495	280,715	109,116	+63.6%



Source: BY17 EHCPM Utilization Projections

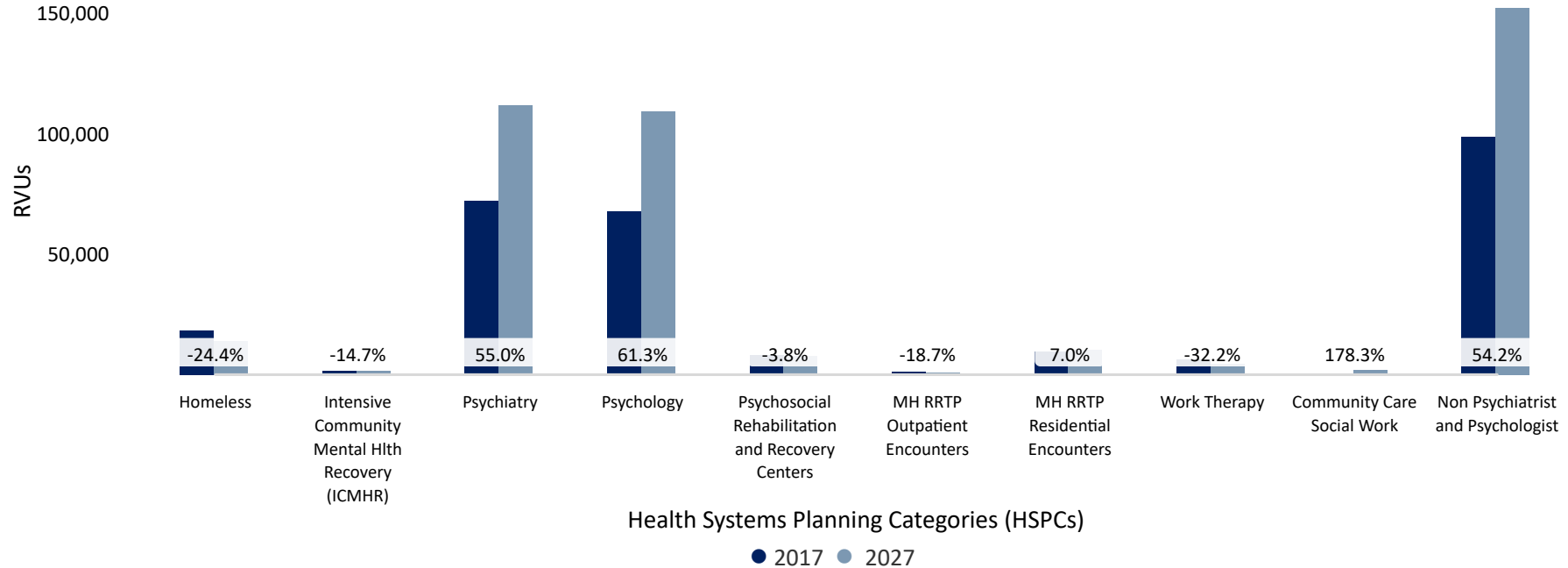
3.1.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

**Demand** ► **Outpatient Utilization Projections by Health Systems Planning Category (HSPC)  
Mental Health RVUs — Eastern Michigan Market**

## Ambulatory Mental Health, Health Systems Planning Categories (HSPCs)



Source: BY17 EHCPM Utilization Projections

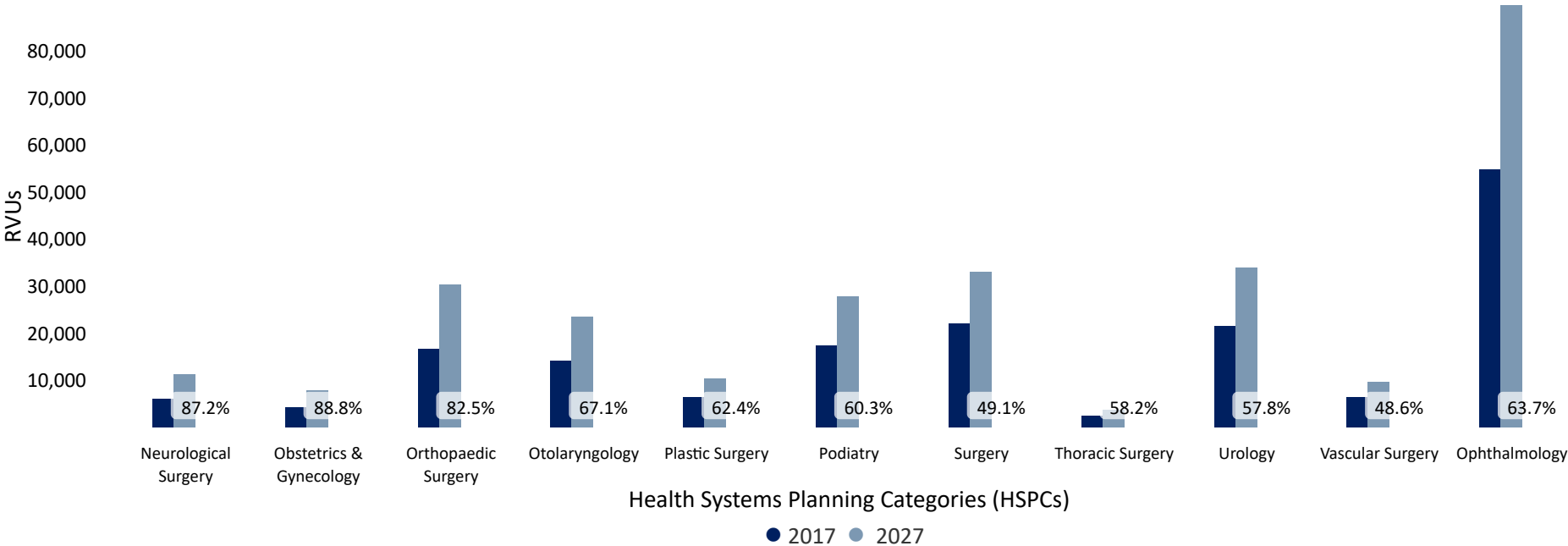
3.2.V10.EasternMichigan



VISN 10: Eastern Michigan Market

**Demand** ▶ **Outpatient Utilization Projections by Health Systems Planning Category (HSPC)**  
**Surgical Specialties RVUs — Eastern Michigan Market**

Ambulatory Surgical Specialties, Health Systems Planning Categories (HSPCs)



Source: BY17 EHCPM Utilization Projections

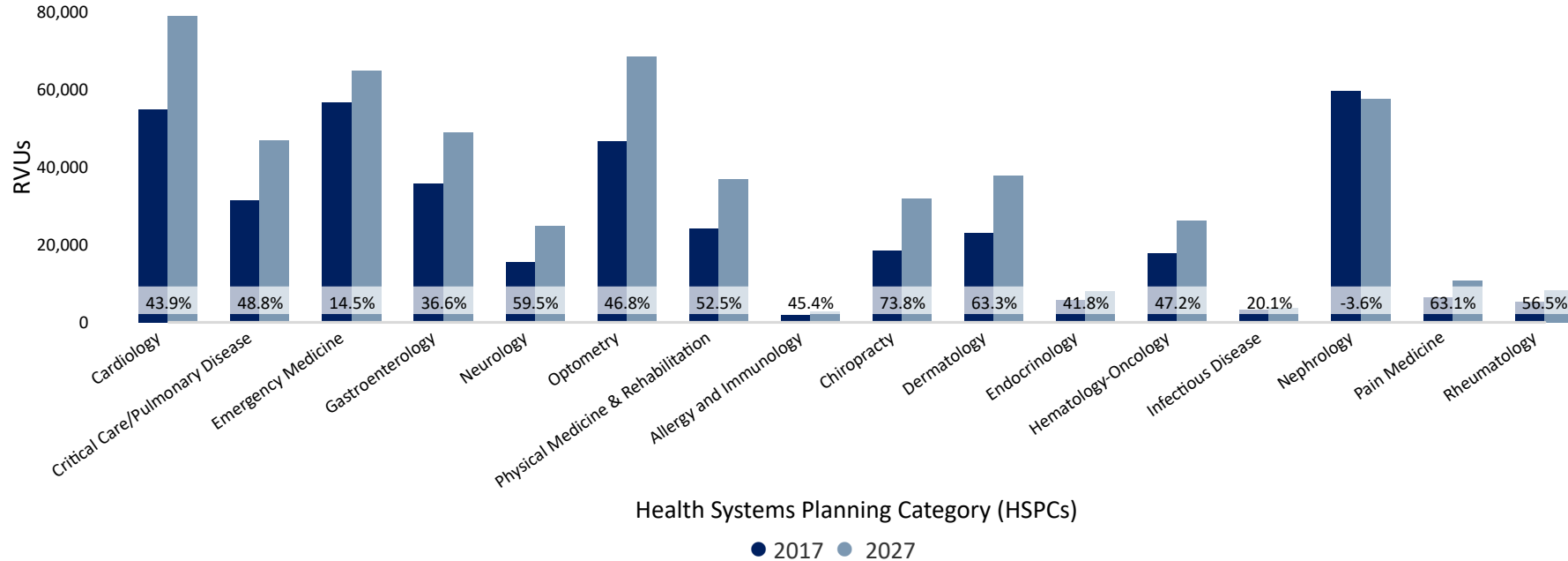




## VISN 10: Eastern Michigan Market

**Demand** ▶ **Outpatient Utilization Projections by Health Systems Planning Category (HSPC) Medical Specialties RVUs — Eastern Michigan Market**

Ambulatory Medical Specialties, Health Systems Planning Categories (HSPCs)



Source: BY17 EHCPM Utilization Projections

3.4.V10.EasternMichigan

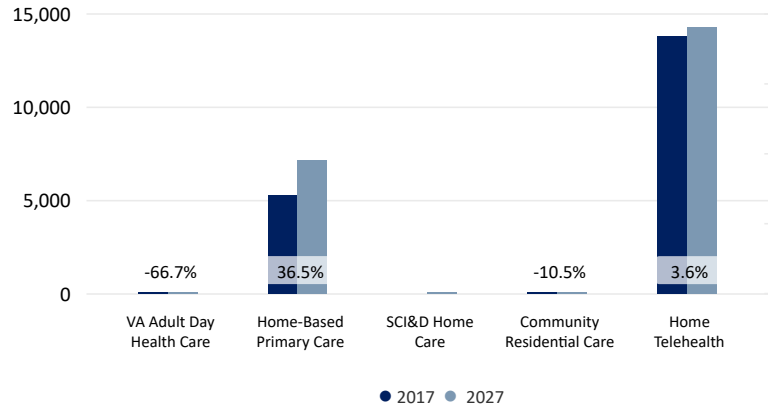


## VISN 10: Eastern Michigan Market

## Demand ► Outpatient Utilization Projections by Health Systems Planning Category (HSPC) Ambulatory Long Term Support Services — Eastern Michigan Market

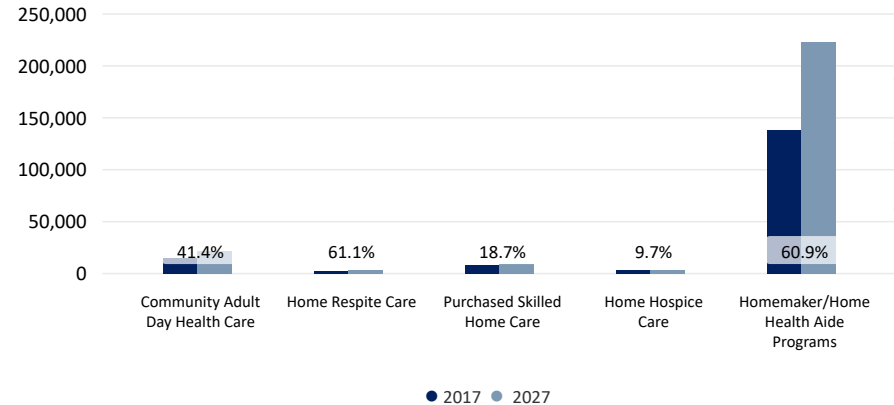
BY17 Eastern Michigan Market In-House LTSS Utilization Projections (RVUs)

	FY17	FY22	FY27	10 Year Change	10 Year % Change
VA Adult Day Health Care	3	1	1	-2	-66.7%
Home-Based Primary Care	5,258	6,311	7,178	1,920	36.5%
SCI&D Home Care	0	3	3	3	
Community Residential Care	19	19	17	-2	-10.5%
Home Telehealth	13,783	14,541	14,286	503	3.6%



BY17 Eastern Michigan Market Community LTSS Utilization Projections (Procedures)

	FY17	FY22	FY27	10 Year Change	10 Year % Change
Community Adult Day Health Care	15,170	18,962	21,448	6,278	41.4%
Home Respite Care	2,186	2,916	3,522	1,336	61.1%
Purchased Skilled Home Care	7,827	8,964	9,293	1,466	18.7%
Home Hospice Care	3,240	3,581	3,554	314	9.7%
Homemaker/Home Health Aide Programs	138,595	194,354	223,026	84,431	60.9%



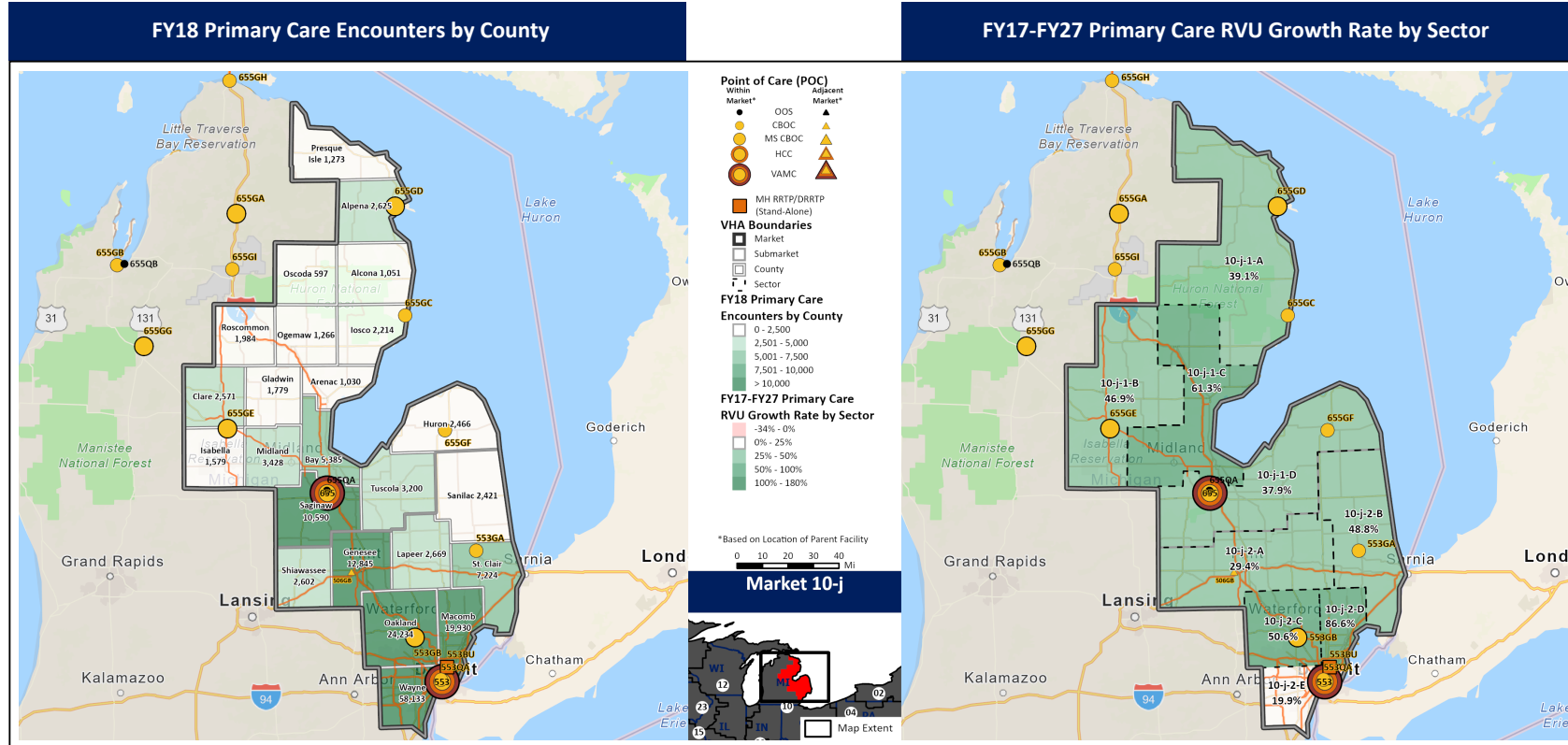
Source: BY17 EHCPM Utilization Projections

3.5.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Demand ► Primary Care Workload – Historic &amp; Projected



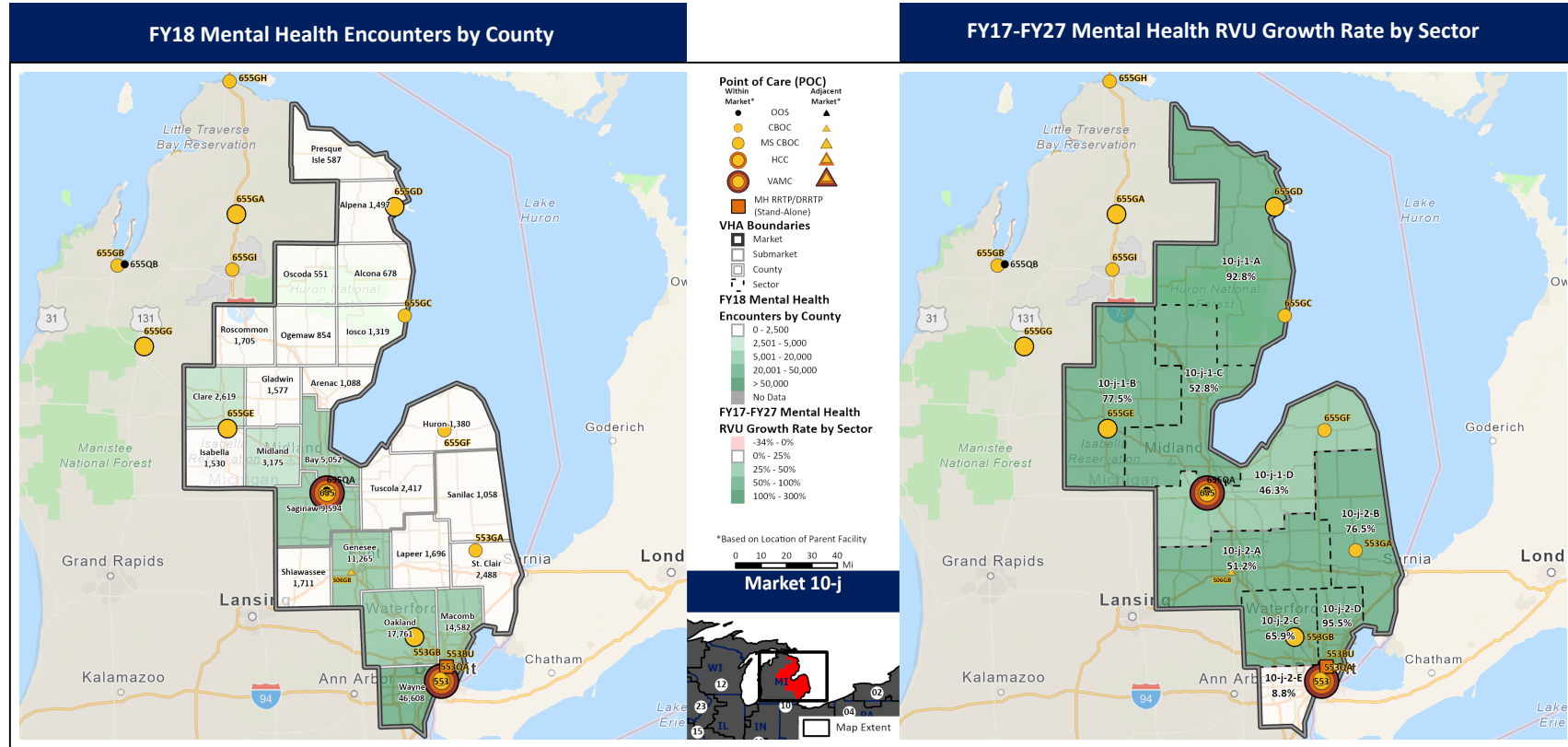
Source: 1. VSSC Encounters Cube 2. BY17 EHCPM Utilization Projections

3.6.V10.EasternMichigan#IMG



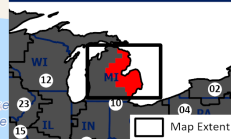
## VISN 10: Eastern Michigan Market

## Demand ► Mental Health Workload – Historic &amp; Projected



Source: 1. VSSC Encounters Cube 2. BY17 ECHPM Utilization Projections

3.7.V10.EasternMichigan#IMG



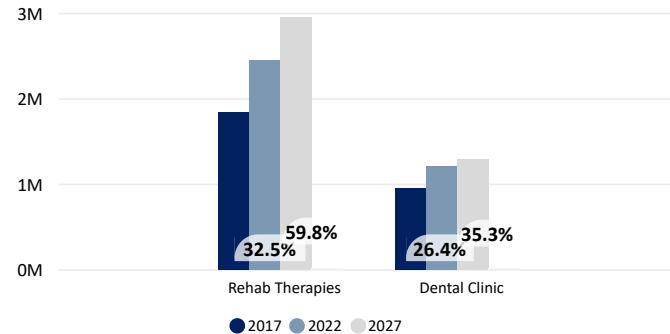
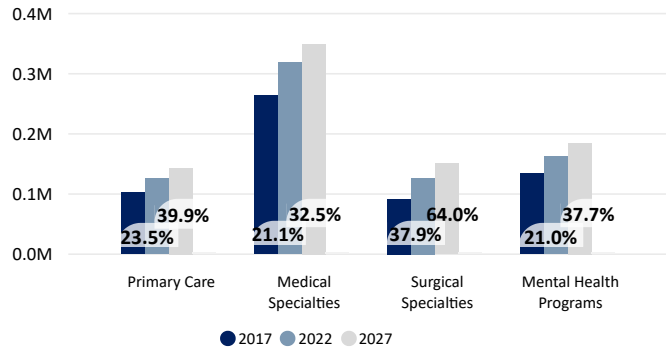
3.8.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market — Detroit-Michigan

Demand ► **BY17 Parent Facility Utilization Projections (Outpatient) – Detroit-Michigan VAMC**

BY17 Detroit-Michigan VAMC Utilization Projections (RVUs)							
	FY17			FY22	FY27	10 Year Change in Total	10 Year % Change in Total
	In-House	Community	Total	Total	Total		
Primary Care	98,666	3,600	102,266	126,322	143,051	40,785	39.9%
Medical Specialties	244,864	18,720	263,584	319,085	349,248	85,664	32.5%
Surgical Specialties	77,786	14,020	91,806	126,597	150,592	58,786	64.0%
Mental Health Programs	131,848	2,253	134,101	162,292	184,660	50,559	37.7%
Rehab Therapies	1,605,227	243,227	1,848,454	2,448,813	2,953,107	1,104,653	59.8%
Dental Clinic	898,357	60,300	958,657	1,211,443	1,297,042	338,385	35.3%



Source: BY17 EHCPM Utilization Projections

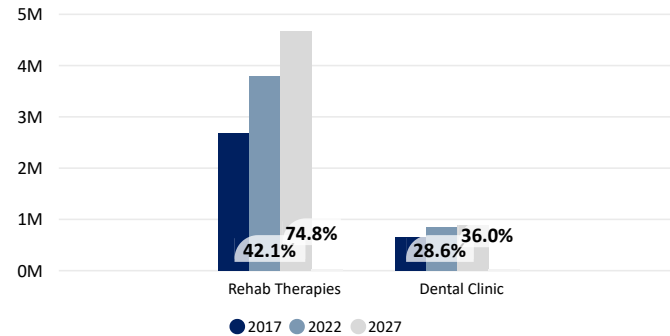
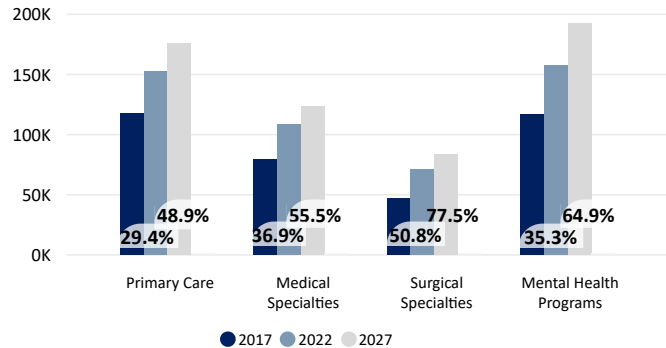
3.9.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

Demand ► **BY17 Parent Facility Utilization Projections (Outpatient) – Saginaw-Michigan VAMC**

BY17 Saginaw-Michigan VAMC Utilization Projections (RVUs)							
	FY17			FY22	FY27	10 Year Change in Total	10 Year % Change in Total
	In-House	Community	Total	Total	Total		
Primary Care	107,407	10,604	118,011	152,661	175,757	57,746	48.9%
Medical Specialties	50,944	28,260	79,204	108,438	123,150	43,946	55.5%
Surgical Specialties	20,822	26,354	47,176	71,129	83,727	36,551	77.5%
Mental Health Programs	115,633	1,012	116,645	157,776	192,316	75,671	64.9%
Rehab Therapies	1,995,337	680,631	2,675,968	3,802,174	4,677,466	2,001,498	74.8%
Dental Clinic	507,903	146,391	654,294	841,400	890,092	235,798	36.0%



Source: BY17 EHCPM Utilization Projections

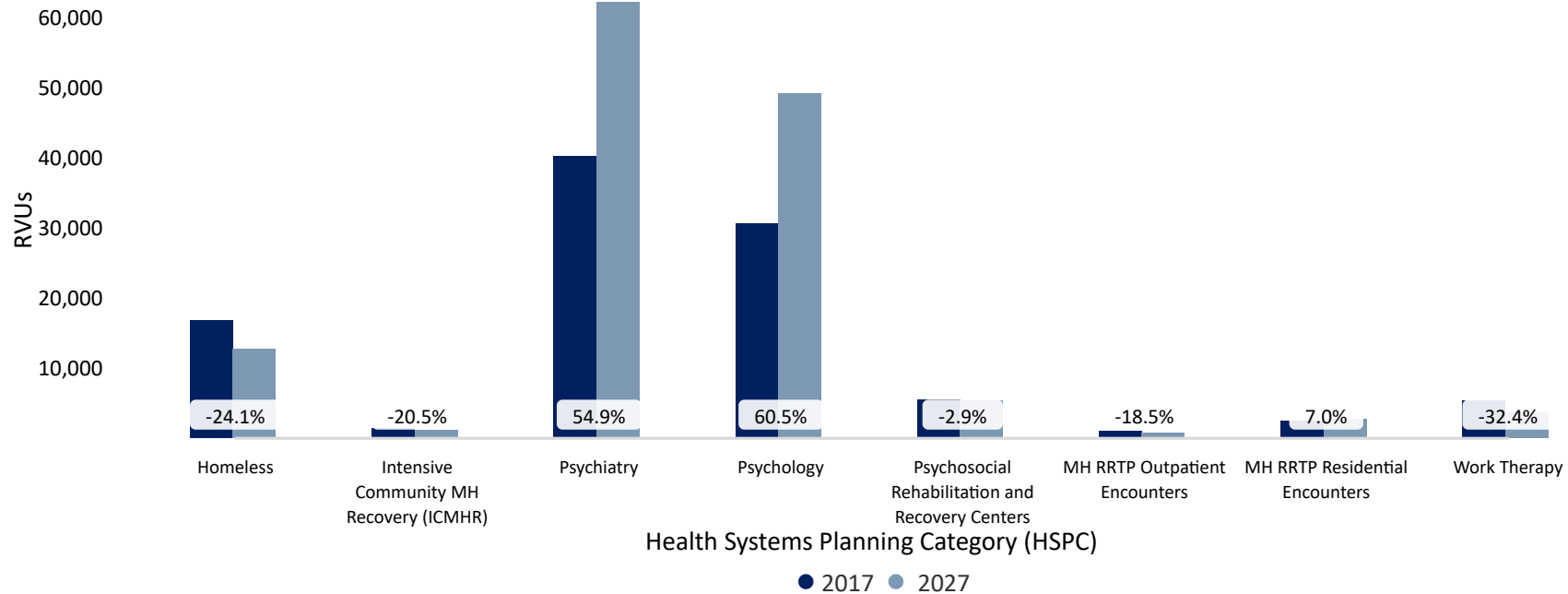
3.9.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Detroit-Michigan

**Demand** ▶ **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC)  
Mental Health RVUs — Detroit-Michigan VAMC**

## Ambulatory Mental Health, Health Systems Planning Categories (HSPCs)



Source: BY17 EHCPM Utilization Projections

3.10.V10.EasternMichigan.553

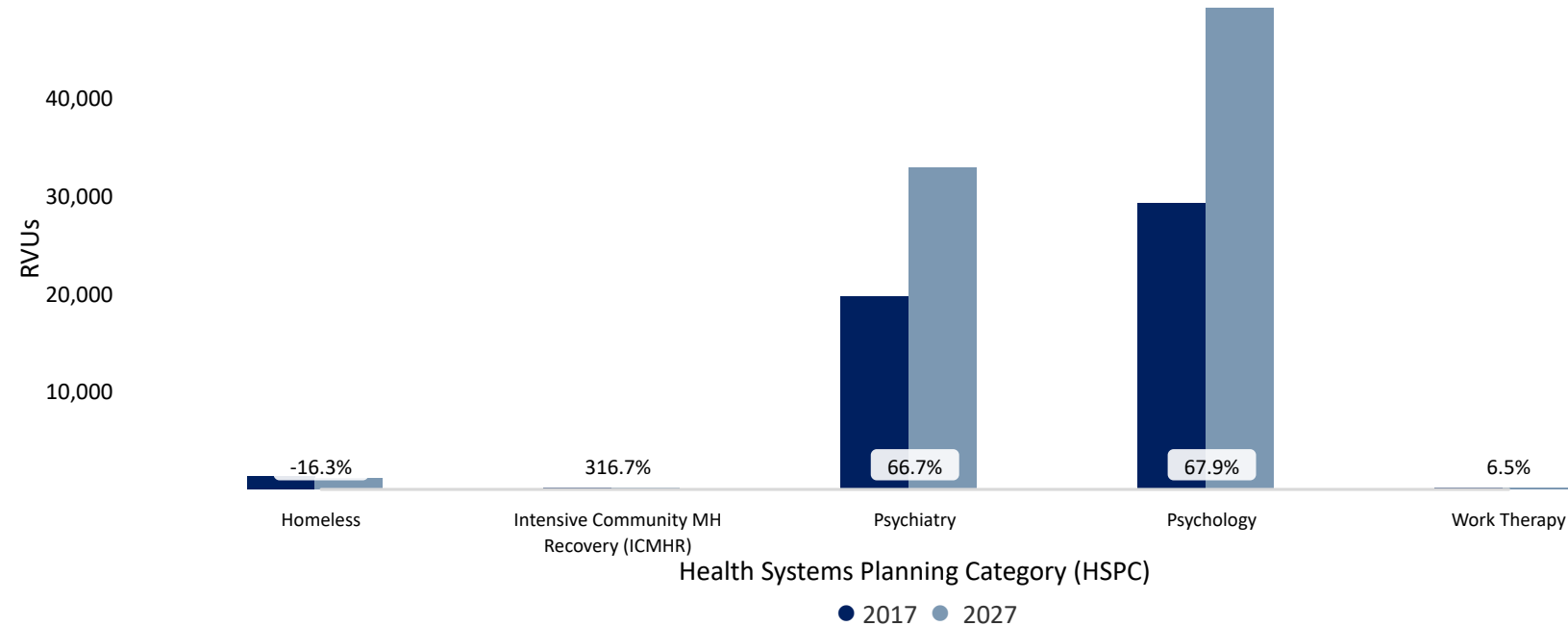




VISN 10: Eastern Michigan Market — Saginaw-Michigan

**Demand** ▶ **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC)  
Mental Health RVUs — Saginaw-Michigan VAMC**

Ambulatory Mental Health, Health Systems Planning Categories (HSPCs)



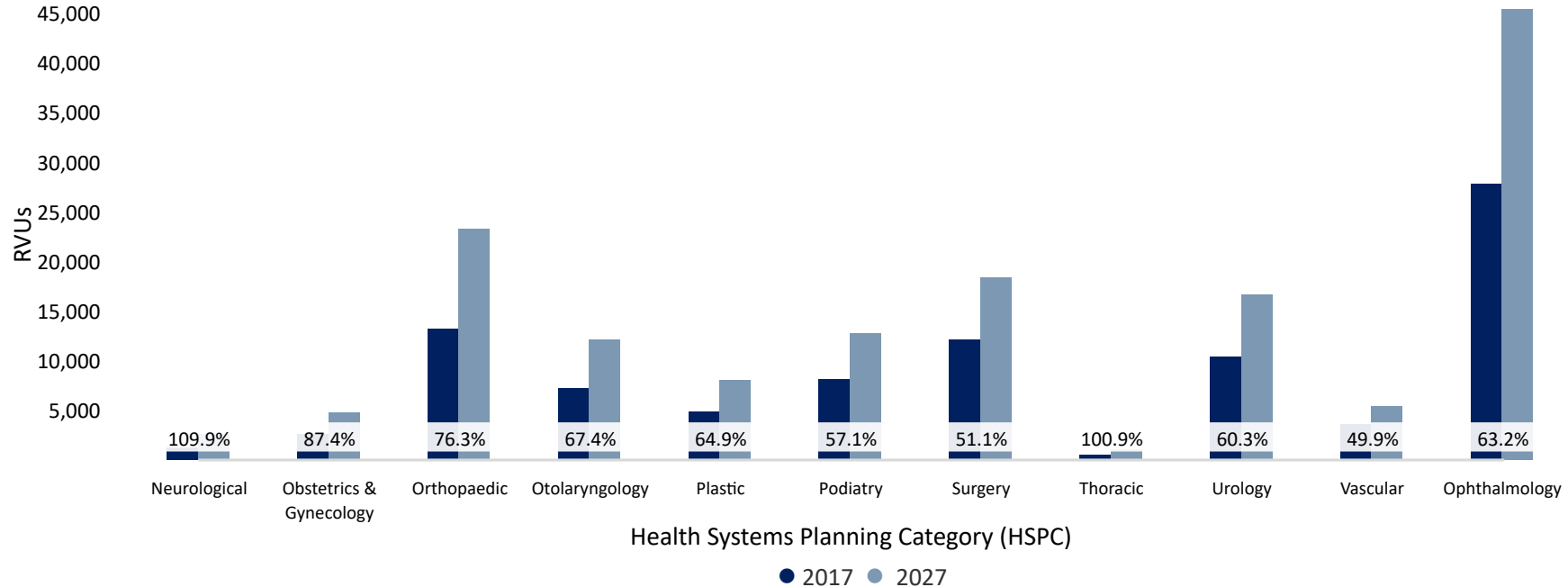
Source: BY17 EHCPM Utilization Projections



## VISN 10: Eastern Michigan Market — Detroit-Michigan

**Demand** ▶ **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC)  
Surgical Specialties RVUs — Detroit-Michigan VAMC**

Ambulatory Surgical Specialties, Health Systems Planning Categories (HSPCs)



Source: BY17 EHCPM Utilization Projections

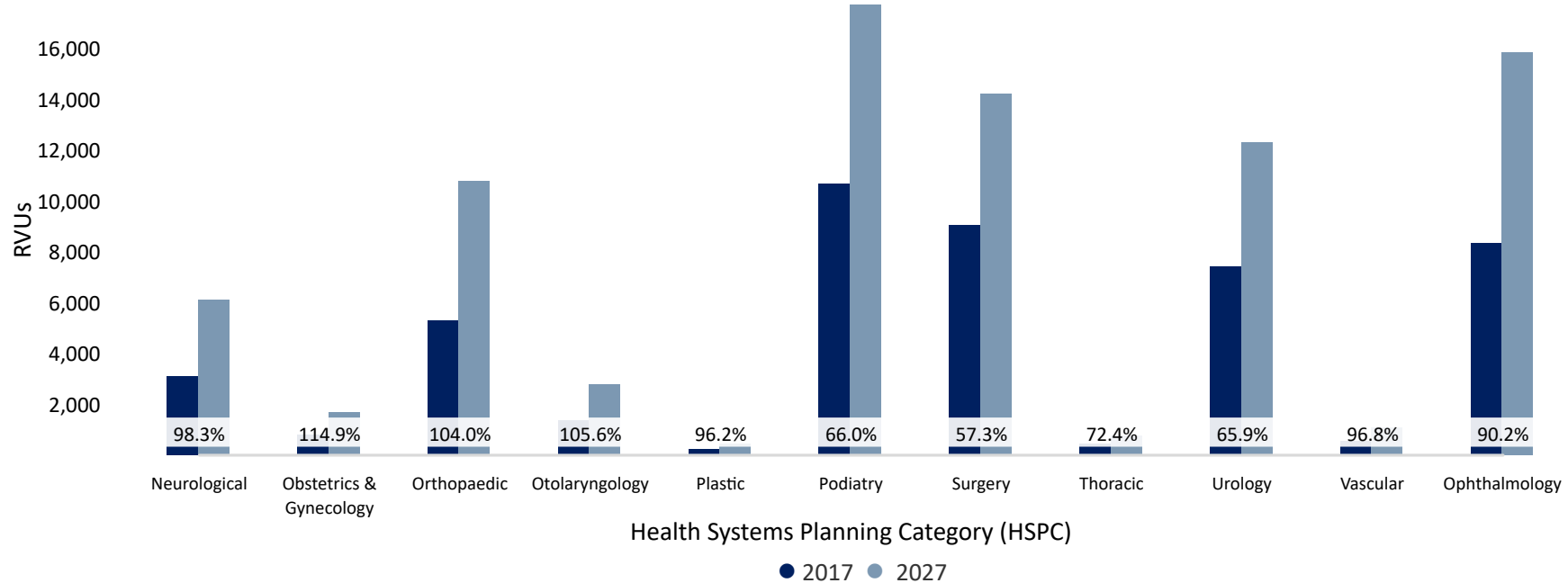
3.11.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

**Demand** ▶ **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC)  
Surgical Specialties RVUs — Saginaw-Michigan VAMC**

Ambulatory Surgical Specialties, Health Systems Planning Categories (HSPCs)



Source: BY17 EHCPM Utilization Projections

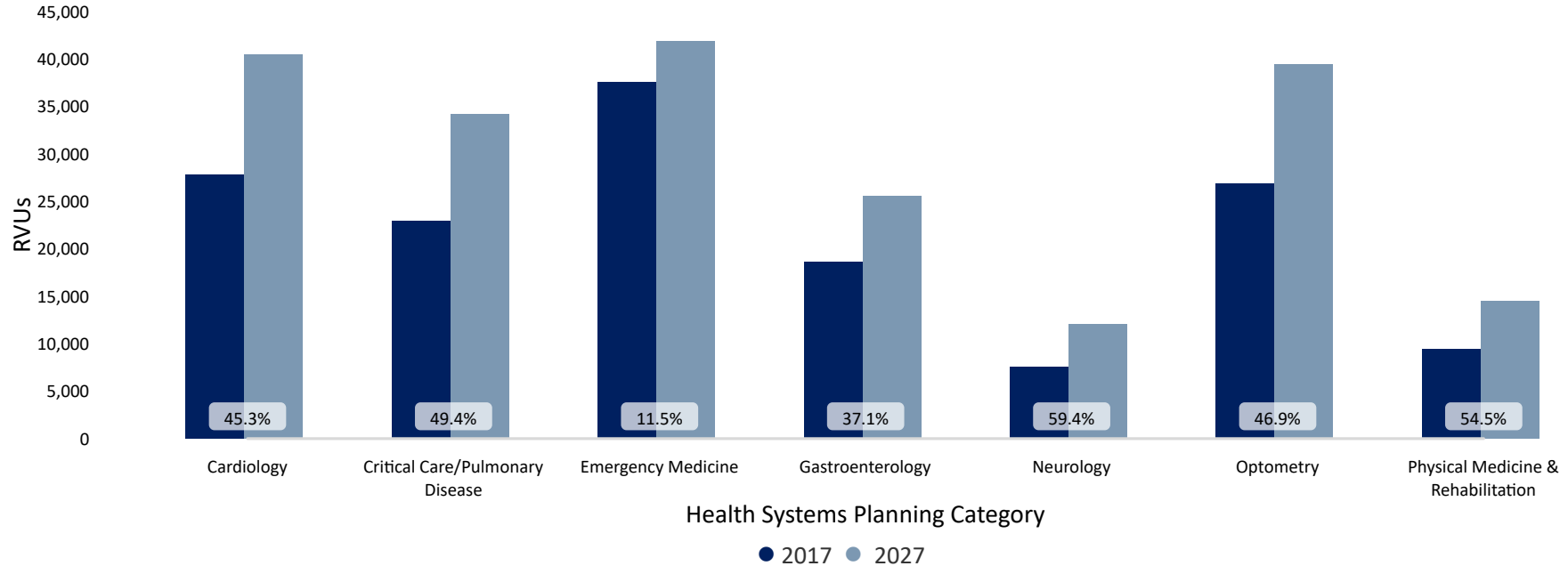
3.11.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Detroit-Michigan

**Demand** ► **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC) Medical Specialties RVUs — Detroit-Michigan VAMC**

## Ambulatory Medical Specialties, Health Systems Planning Categories (HSPCs)

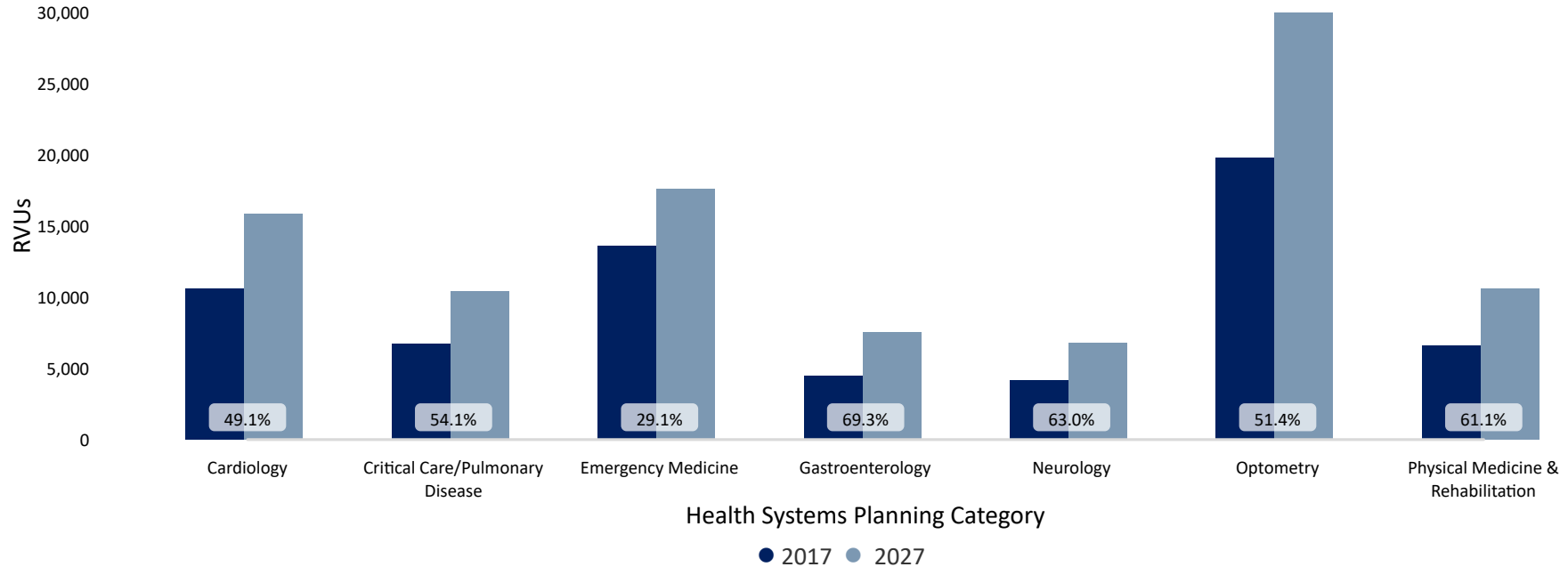




## VISN 10: Eastern Michigan Market — Saginaw-Michigan

**Demand** ► **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC) Medical Specialties RVUs — Saginaw-Michigan VAMC**

Ambulatory Medical Specialties, Health Systems Planning Categories (HSPCs)



Source: BY17 EHCPM Utilization Projections

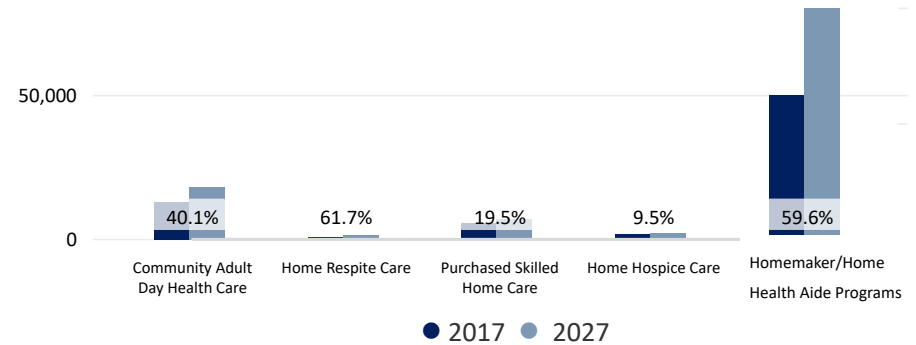
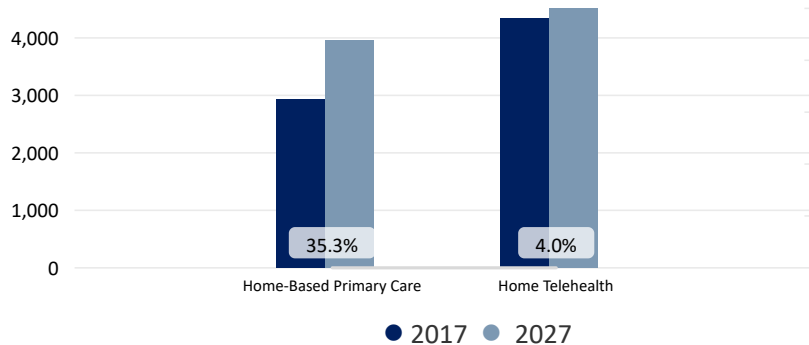
3.12.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Detroit-Michigan

### Demand ► Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC) Ambulatory Long Term Support Services — Detroit-Michigan VAMC

BY17 Detroit-Michigan VAMC In-House LTSS Utilization Projections (RVUs)						BY17 Detroit-Michigan VAMC Community LTSS Utilization Projections (Procedures)*					
	FY17	FY22	FY27	10 Year Change	10 Year % Change		FY17	FY22	FY27	10 Year Change	10 Year % Change
SCI&D Home Care	N/A	N/A	N/A	N/A	N/A	Community Adult Day Health Care	13,004	16,106	18,216	5,212	40.1%
VA Adult Day Health Care	N/A	N/A	N/A	N/A	N/A	Home Respite Care	851	1,134	1,376	525	61.7%
Community Residential Care	N/A	N/A	N/A	N/A	N/A	Purchased Skilled Home Care	5,808	6,671	6,939	1,131	19.5%
Home-Based Primary Care	2,930	3,490	3,964	1,034	35.3%	Home Hospice Care	2,041	2,252	2,234	193	9.5%
Home Telehealth	4,340	4,578	4,513	173	4.0%	Homemaker/Home Health Aide Programs	50,290	69,927	80,284	29,994	59.6%



\* Provided at procedure level given the limited RVU reporting for these services

Source: BY17 EHCPM Utilization Projections

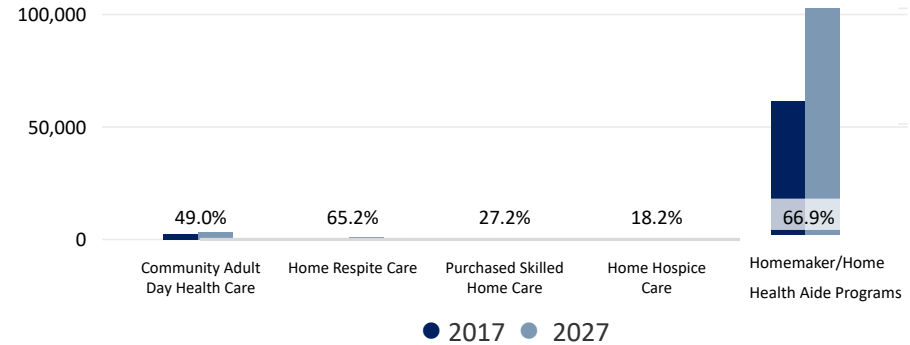
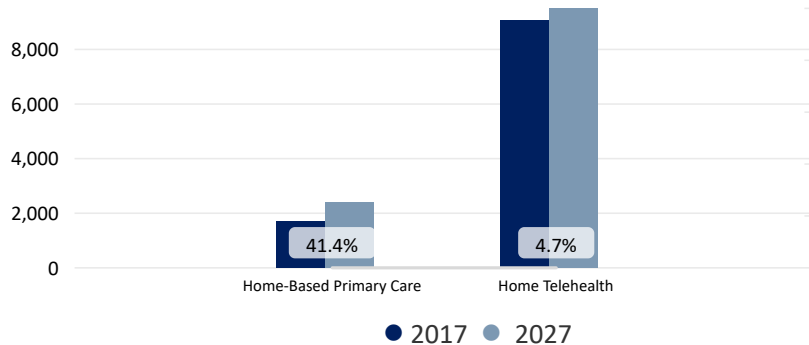
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## VISN 10: Eastern Michigan Market — Saginaw-Michigan

### Demand ► Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC) Ambulatory Long Term Support Services — Saginaw-Michigan VAMC

BY17 Saginaw-Michigan VAMC In-House LTSS Utilization Projections (RVUs)						BY17 Saginaw-Michigan VAMC Community LTSS Utilization Projections (Procedures)*					
	FY17	FY22	FY27	10 Year Change	10 Year % Change		FY17	FY22	FY27	10 Year Change	10 Year % Change
SCI&D Home Care	N/A	N/A	N/A	N/A	N/A	Community Adult Day Health Care	2,299	3,026	3,426	1,127	49.0%
VA Adult Day Health Care	N/A	N/A	N/A	N/A	N/A	Home Respite Care	785	1,064	1,297	512	65.2%
Community Residential Care	N/A	N/A	N/A	N/A	N/A	Purchased Skilled Home Care	158	191	201	43	27.2%
Home-Based Primary Care	1,692	2,086	2,394	701	41.4%	Home Hospice Care	11	13	13	2	18.2%
Home Telehealth	9,078	9,653	9,504	426	4.7%	Homemaker/Home Health Aide Programs	61,528	88,783	102,688	41,160	66.9%



\* Provided at procedure level given the limited RVU reporting for these services

Source: BY17 EHCPM Utilization Projections

3.13.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► Overall Outpatient Commercial Demand – Detroit-Michigan Area

## • Overview:

- ✓ Outpatient demand estimates (patient visits) were also developed to understand current and future expected commercial outpatient demand
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Patient Visits				Growth Projections		
	2018	2023	2028	5 Year Chg	% Chg	10 Year Chg	% Chg
General/Family Practice	5,753,055	6,056,281	6,443,740	303,227	5.3%	690,685	12.0%
Internal Medicine	3,418,706	3,724,425	4,068,094	305,720	8.9%	649,388	19.0%
Primary Care Total	9,171,760	9,780,707	10,511,834	608,946	6.6%	1,340,073	14.6%
Allergy/Immunology	181,682	194,545	210,081	12,863	7.1%	28,400	15.6%
Cardiology	1,015,139	1,176,207	1,344,390	161,068	15.9%	329,251	32.4%
Dermatology	842,762	926,986	1,019,271	84,224	10.0%	176,509	20.9%
Endocrinology	247,828	266,747	288,713	18,919	7.6%	40,885	16.5%
Gastroenterology	371,707	408,496	448,947	36,789	9.9%	77,240	20.8%
Hematology/Oncology	831,586	962,532	1,099,231	130,946	15.7%	267,645	32.2%
Infectious Disease	50,086	55,032	60,479	4,946	9.9%	10,394	20.8%
Nephrology	152,808	177,868	204,132	25,060	16.4%	51,325	33.6%
Neurology	337,474	364,180	394,153	26,706	7.9%	56,679	16.8%
Pain Management	176,429	198,820	223,028	22,391	12.7%	46,599	26.4%
Pulmonology	227,658	256,889	288,106	29,231	12.8%	60,448	26.6%
Rheumatology	216,927	237,784	261,196	20,857	9.6%	44,269	20.4%
Vascular	63,347	74,888	86,916	11,541	18.2%	23,569	37.2%
Specialty Care (Medicine) Sub-Total	4,715,433	5,300,974	5,928,643	585,541	12.4%	1,213,211	25.7%
Cardio/Thoracic Surgery	28,001	31,290	34,719	3,288	11.7%	6,718	24.0%
Colorectal Surgery	25,647	27,822	30,293	2,175	8.5%	4,646	18.1%
General Surgery	315,871	345,498	377,718	29,627	9.4%	61,847	19.6%
Neurosurgery	67,342	72,159	77,658	4,817	7.2%	10,316	15.3%
Ophthalmology	986,677	1,121,398	1,265,908	134,721	13.7%	279,231	28.3%
Orthopedic Surgery	881,544	957,836	1,042,743	76,292	8.7%	161,199	18.3%
Otolaryngology	377,740	408,101	442,771	30,361	8.0%	65,031	17.2%
Plastic Surgery	67,798	73,700	80,272	5,902	8.7%	12,474	18.4%
Urology	436,307	494,126	556,189	57,819	13.3%	119,882	27.5%
Specialty Care (Surgery) Sub-Total	3,186,928	3,531,929	3,908,272	345,002	10.8%	721,344	22.6%
Medicine/Surgery Total	7,902,361	8,832,903	9,836,915	930,542	11.8%	1,934,555	24.5%
Obstetrics/Gynecology	1,036,404	1,071,260	1,124,448	34,857	3.4%	88,044	8.5%
Women's Health Total	1,036,404	1,071,260	1,124,448	34,857	3.4%	88,044	8.5%
Psychiatry	710,560	725,289	754,349	14,730	2.1%	43,789	6.2%
Mental Health Total	710,560	725,289	754,349	14,730	2.1%	43,789	6.2%
Physical Medicine/Rehab	221,309	241,185	263,751	19,876	9.0%	42,441	19.2%
Rehab Total	221,309	241,185	263,751	19,876	9.0%	42,441	19.2%
Emergency/Critical Care	2,262,351	2,451,373	2,643,315	189,022	8.4%	380,964	16.8%





## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► Overall Outpatient Commercial Demand – Detroit-Michigan Area, cont.

- Overview:

- ✓ Outpatient demand estimates (patient visits) were also developed to understand current and future expected commercial outpatient demand
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Patient Visits			Growth Projections			
	2018	2023	2028	5 Year Chg	% Chg	10 Year Chg	% Chg
Emergency Services Total	2,262,351	2,451,373	2,643,315	189,022	8.4%	380,964	16.8%
Nurse Practitioner	795,540	873,419	961,601	77,879	9.8%	166,061	20.9%
Physician Assistant	543,840	606,143	674,747	62,303	11.5%	130,907	24.1%
Other Services Total	1,339,380	1,479,562	1,636,348	140,182	10.5%	296,968	22.2%
Grand Total	22,644,125	24,582,279	26,770,960	1,938,154	8.6%	4,126,835	18.2%



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Overall Outpatient Commercial Demand – Saginaw-Michigan Area

## • Overview:

- ✓ Outpatient demand estimates (patient visits) were also developed to understand current and future expected commercial outpatient demand
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Patient Visits				Growth Projections		
	2018	2023	2028	5 Year Chg	% Chg	10 Year Chg	% Chg
General/Family Practice	1,474,128	1,511,470	1,562,654	37,342	2.5%	88,525	6.0%
Internal Medicine	875,164	922,017	972,110	46,853	5.4%	96,946	11.1%
Primary Care Total	2,349,293	2,433,488	2,534,764	84,195	3.6%	185,471	7.9%
Allergy/Immunology	46,063	47,890	50,172	1,827	4.0%	4,109	8.9%
Cardiology	239,573	265,690	291,390	26,117	10.9%	51,817	21.6%
Dermatology	213,306	227,213	241,764	13,908	6.5%	28,458	13.3%
Endocrinology	64,095	66,737	69,731	2,643	4.1%	5,636	8.8%
Gastroenterology	91,806	96,776	102,062	4,970	5.4%	10,256	11.2%
Hematology/Oncology	204,781	227,452	249,224	22,671	11.1%	44,443	21.7%
Infectious Disease	12,969	13,758	14,562	788	6.1%	1,592	12.3%
Nephrology	35,727	39,758	43,771	4,031	11.3%	8,044	22.5%
Neurology	87,106	91,075	95,185	3,969	4.6%	8,078	9.3%
Pain Management	42,900	46,293	49,827	3,394	7.9%	6,927	16.1%
Pulmonology	56,441	61,073	65,731	4,631	8.2%	9,290	16.5%
Rheumatology	55,541	58,628	61,998	3,087	5.6%	6,457	11.6%
Vascular	14,375	16,251	18,112	1,876	13.0%	3,737	26.0%
Specialty Care (Medicine) Sub-Total	1,164,684	1,258,596	1,353,528	93,912	8.1%	188,844	16.2%
Cardio/Thoracic Surgery	7,060	7,571	8,044	510	7.2%	984	13.9%
Colorectal Surgery	6,512	6,802	7,125	290	4.5%	614	9.4%
General Surgery	78,752	83,034	87,344	4,282	5.4%	8,593	10.9%
Neurosurgery	17,440	18,013	18,649	572	3.3%	1,208	6.9%
Ophthalmology	243,264	265,689	288,682	22,425	9.2%	45,418	18.7%
Orthopedic Surgery	224,592	235,747	247,717	11,155	5.0%	23,125	10.3%
Otolaryngology	96,071	100,456	105,399	4,385	4.6%	9,328	9.7%
Plastic Surgery	17,019	17,840	18,707	821	4.8%	1,688	9.9%
Urology	111,846	121,672	131,655	9,826	8.8%	19,808	17.7%
Specialty Care (Surgery) Sub-Total	802,556	856,823	913,322	54,267	6.8%	110,765	13.8%
Medicine/Surgery Total	1,967,240	2,115,419	2,266,849	148,179	7.5%	299,609	15.2%
Obstetrics/Gynecology	259,106	264,568	273,090	5,463	2.1%	13,984	5.4%
Women's Health Total	259,106	264,568	273,090	5,463	2.1%	13,984	5.4%
Psychiatry	187,345	187,155	189,776	-190	-0.1%	2,432	1.3%
Mental Health Total	187,345	187,155	189,776	-190	-0.1%	2,432	1.3%
Physical Medicine/Rehab	56,120	58,932	62,078	2,812	5.0%	5,958	10.6%
Rehab Total	56,120	58,932	62,078	2,812	5.0%	5,958	10.6%
Emergency/Critical Care	612,846	650,301	679,919	37,456	6.1%	67,073	10.9%



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Overall Outpatient Commercial Demand – Saginaw-Michigan Area, cont.

## • Overview:

- ✓ Outpatient demand estimates (patient visits) were also developed to understand current and future expected commercial outpatient demand
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Patient Visits			Growth Projections			
	2018	2023	2028	5 Year Chg	% Chg	10 Year Chg	% Chg
Emergency Services Total	612,846	650,301	679,919	37,456	6.1%	67,073	10.9%
Nurse Practitioner	195,321	207,632	221,256	12,311	6.3%	25,935	13.3%
Physician Assistant	132,516	142,729	153,556	10,212	7.7%	21,040	15.9%
Other Services Total	327,837	350,361	374,813	22,524	6.9%	46,975	14.3%
Grand Total	5,759,787	6,060,224	6,381,288	300,437	5.2%	621,502	10.8%



## Demand ► Estimated Current and Historic Market Demand — Inpatient



## VISN 10: Eastern Michigan Market – Detroit-Michigan

## Demand ► Inpatient Demand and CMI – Detroit-Michigan

Operating Beds from PTF Cube					Operating Beds Reported by Field	Average Daily Census (ADC)				
Bed Service	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	FY15-18 Change %
Medical	50	50	50	50	76	35.2	34.8	28.7	28.5	-19.0%
Surgery	25	25	25	25	30	10.8	9.6	10.9	9.7	-10.2%
Total Med/Surg	75	75	75	75	106	46.0	44.4	39.6	38.2	-17.0%
Mental Health	30	30	30	30	28	12.8	11.2	11.9	11.3	-11.7%
Intermediate	N/A	N/A	N/A	N/A	21	N/A	N/A	N/A	N/A	N/A
RRTP*	50	50	50	N/A	0	0.5	0.1	N/A	N/A	-100.0%
CLC	109	109	109	109	60	65.5	55.5	55.4	51.8	-20.9%
VAMC Total	264	264	264	214	215	124.8	111.2	106.9	101.3	-18.8%

Operating Beds from PTF Cube					Operating Beds Reported by Field	Average Daily Census (ADC)				
Bed Service	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	FY15-18 Change %
RRTP*	0	0	0	50	50	38.3	38.1	35.9	33.3	-13.1%
(553BU) Detroit Domiciliary Total	0	0	0	50	50	38.3	38.1	35.9	33.3	-13.1%

VAMC Case Mix Index <sup>3</sup>									Commercial Provider Case Mix Index <sup>4</sup>	
Facility	2015 Unique	2016 Unique	2017 Unique	2018 Unique	2015 CMI	2016 CMI	2017 CMI	2018 CMI	Median CMI*	High CMI**
(553) Detroit-Michigan	2,636	2,606	2,389	2,411	1.24	1.20	1.25	1.36	1.62	3.05

\*RRTP includes Domiciliary and CWT/TR Bed Services \*\*Market: Within a 60 minute drive time of the VAMC

Note: Prior to FY18, Beds for VA Extended Care Sites (Stand-Alone CLCs) and VA Residential Care Sites (Stand Alone Domiciliaries and/or PRRTPs) were aggregated and reported under the Administrative Parent Facility the National Bed Control Database. Efforts to align beds to the physical site of care were made when the Facility Classification model was implemented in FY18, therefore in prior years, beds are shown at the Parent level and do not accurately reflect bed mappings to the site of care.

Source: 1. Beds reported by the field in GFI submission 2. VSSC Beds Using PTF Cube 3. MCAO Discharge Cube 4. CMI (acute inpatient care) based on Medicare only population from 2018 CMS Cost Reports **4.6.V10.EasternMichigan.553**



## VISN 10: Eastern Michigan Market – Saginaw-Michigan

## Demand ► Inpatient Demand and CMI – Saginaw-Michigan

Operating Beds from PTF Cube					Operating Beds Reported by Field	Average Daily Census (ADC)				
Bed Service	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	FY15-18 Change %
Medical	8	8	8	8	8	3.6	3.4	3.9	2.9	-19.4%
Total Med/Surg	8	8	8	8	8	3.6	3.4	3.9	2.9	-19.4%
CLC	81	81	81	81	81	36.4	34.2	33.5	28.7	-21.2%
VAMC Total	89	89	89	89	89	40.0	37.6	37.4	31.6	-21.0%

Facility	VAMC Case Mix Index <sup>3</sup>								Commercial Provider Case Mix Index <sup>4</sup>	
	2015 Unique	2016 Unique	2017 Unique	2018 Unique	2015 CMI	2016 CMI	2017 CMI	2018 CMI	Median CMI*	High CMI**
(655) Saginaw-Michigan	379	383	336	294	0.95	0.91	0.90	0.96	1.71	2.01

\*RRTP includes Domiciliary and CWT/TR Bed Services

\*\*Market: Within a 60 minute drive time of the VAMC

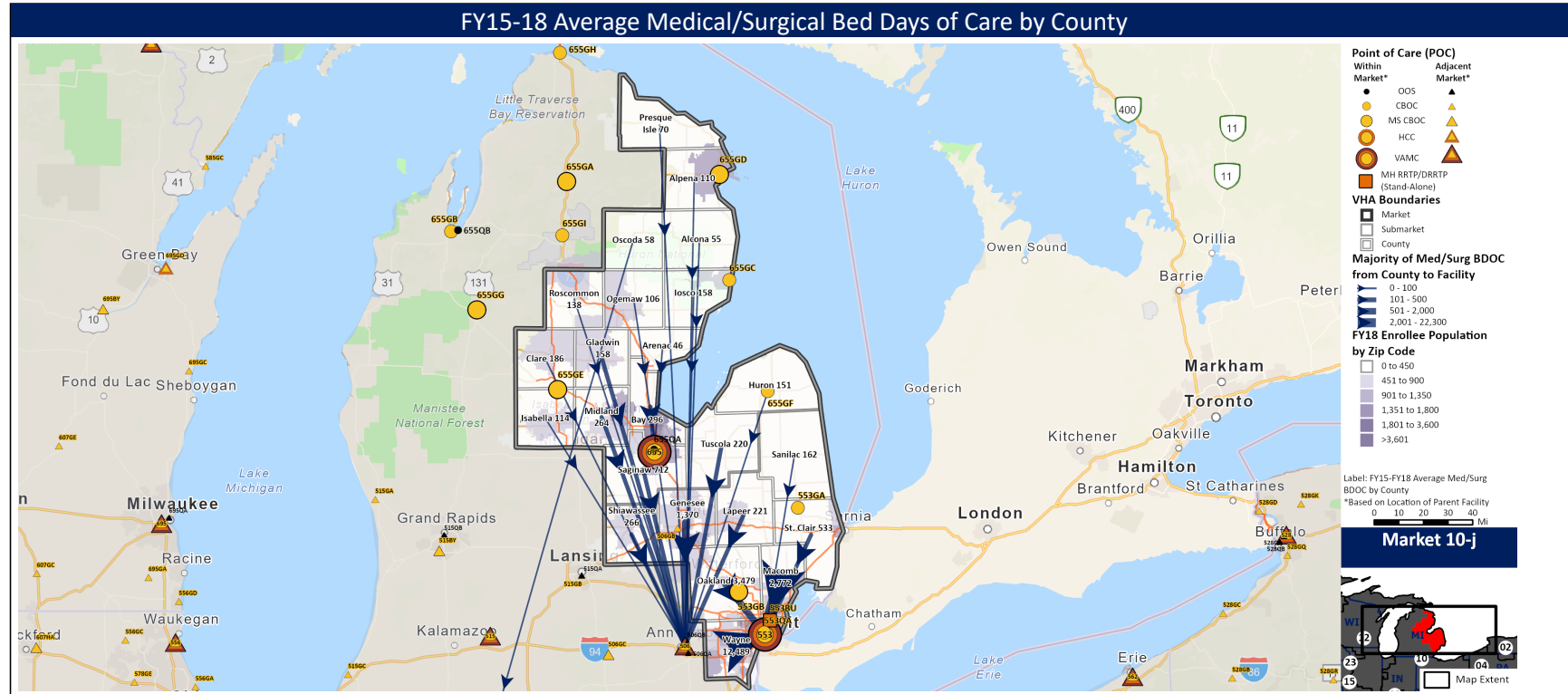
Source: 1. Beds reported by the field in GFI submission 2. VSSC Beds Using PTF Cube 3. MCAO Discharge Cube 4. CMI (acute inpatient care) based on Medicare only population from 2018 CMS Cost Reports

4.6.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market

## Demand ► Medical/Surgical Bed Days of Care (BDOC) – FY15-18



Source: 1. VSSC Treating Specialty Cube 2. Geocoded Enrollee File FY18Q4

4.1.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Demand ► Medical/Surgical BDOC — FY15-18, cont.

County	FY18 BDOC	FY18 ADC	% ADC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Alcona, MI	42	0.1	19.1%	55	(V10) (506) Ann Arbor-Michigan	73.8%
Alpena, MI	76	0.2	17.3%	110	(V10) (506) Ann Arbor-Michigan	88.2%
Arenac, MI	35	0.1	18.8%	47	(V10) (655) Saginaw-Michigan	40.0%
Bay, MI	290	0.8	24.5%	296	(V10) (655) Saginaw-Michigan	43.4%
Clare, MI	106	0.3	14.2%	186	(V10) (506) Ann Arbor-Michigan	45.3%
Genesee, MI	1,391	3.8	25.4%	1,370	(V10) (506) Ann Arbor-Michigan	82.2%
Gladwin, MI	114	0.3	18.0%	159	(V10) (506) Ann Arbor-Michigan	66.7%
Huron, MI	112	0.3	18.6%	151	(V10) (506) Ann Arbor-Michigan	66.1%
Iosco, MI	146	0.4	23.2%	158	(V10) (506) Ann Arbor-Michigan	61.6%
Isabella, MI	129	0.4	28.4%	114	(V10) (506) Ann Arbor-Michigan	71.3%
Lapeer, MI	205	0.6	23.2%	221	(V10) (506) Ann Arbor-Michigan	71.7%
Macomb, MI	3,091	8.5	27.9%	2,772	(V10) (553) Detroit-Michigan	76.3%
Midland, MI	221	0.6	21.0%	264	(V10) (506) Ann Arbor-Michigan	45.7%
Oakland, MI	3,714	10.2	26.7%	3,479	(V10) (553) Detroit-Michigan	52.5%
Ogemaw, MI	99	0.3	23.2%	107	(V10) (506) Ann Arbor-Michigan	46.5%
Oscoda, MI	48	0.1	20.5%	59	(V16) (520) Biloxi	39.6%
Presque Isle, MI	149	0.4	53.2%	70	(V10) (506) Ann Arbor-Michigan	96.6%
Roscommon, MI	28	0.1	5.1%	139	(V10) (506) Ann Arbor-Michigan	50.0%





## VISN 10: Eastern Michigan Market

## Demand ► Medical/Surgical BDOC — FY15-18, cont.

County	FY18 BDOC	FY18 ADC	% ADC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Saginaw, MI	624	1.7	21.9%	712	(V10) (506) Ann Arbor-Michigan	45.2%
Saint Clair, MI	387	1.1	18.1%	533	(V10) (553) Detroit-Michigan	71.1%
Sanilac, MI	103	0.3	15.9%	162	(V10) (553) Detroit-Michigan	43.7%
Shiawassee, MI	247	0.7	23.2%	266	(V10) (506) Ann Arbor-Michigan	86.6%
Tuscola, MI	197	0.5	22.4%	220	(V10) (506) Ann Arbor-Michigan	55.8%
Wayne, MI	12,537	34.3	25.1%	12,489	(V10) (553) Detroit-Michigan	64.2%
Total	24,091	66.0	N/A	24,134		N/A



## VISN 10: Eastern Michigan Market

## Demand ► Top DRGs for Medicine in FY18

	DRG	In Market BDOC	In Market BDOC % of Total	In and Out of Market BDOC	In and Out of Market % of Total BDOC
(V10) (553) Detroit-Michigan	O (189) Pulmonary Edema & Respiratory Failure	440	4.7%	445	4.6%
	O (871) Septicemia W/o Mv 96+ Hours W Mcc	320	3.5%	334	3.5%
	O (392) Esophagitis, Gastroent & Misc Digest Disorders W/o Mcc	237	2.6%	270	2.8%
	O (292) Heart Failure & Shock W Cc	236	2.5%	236	2.4%
	O (603) Cellulitis W/o Mcc	219	2.4%	227	2.3%
	O (193) Simple Pneumonia & Pleurisy W Mcc	217	2.3%	222	2.3%
	O (291) Heart Failure & Shock W Mcc	194	2.1%	195	2.0%
	O (312) Syncope & Collapse	170	1.8%	174	1.8%
	O (314) Other Circulatory System Diagnoses W Mcc	73	0.8%	169	1.7%
	O (683) Renal Failure W Cc	160	1.7%	160	1.7%
	Other	7002	75.6%	7248	74.9%
	<b>Total</b>	<b>9268</b>	<b>100.0%</b>	<b>9680</b>	<b>100.0%</b>
(V10) (553BU) Detroit Domiciliary	N (313) Chest pain	1	100.0%	1	100.0%
	<b>Total</b>	<b>1</b>	<b>100.0%</b>	<b>1</b>	<b>100.0%</b>
(V10) (655) Saginaw-Michigan	O (603) Cellulitis W/o Mcc	48	6.9%	65	8.2%
	O (194) Simple Pneumonia & Pleurisy W Cc	53	7.6%	62	7.8%
	O (872) Septicemia W/o Mv 96+ Hours W/o Mcc	49	7.0%	55	6.9%
	O (638) Diabetes W Cc	42	6.0%	52	6.5%
	O (292) Heart Failure & Shock W Cc	27	3.9%	35	4.4%
	O (195) Simple Pneumonia & Pleurisy W/o Cc/mcc	25	3.6%	29	3.6%
	O (540) Osteomyelitis W Cc	28	4.0%	28	3.5%
	O (641) Nutritional & Misc Metabolic Disorders W/o Mcc	20	2.9%	28	3.5%
	O (689) Kidney & Urinary Tract Infections W Mcc	26	3.7%	26	3.3%
	O (193) Simple Pneumonia & Pleurisy W Mcc	26	3.7%	26	3.3%



## VISN 10: Eastern Michigan Market

## Demand ► Top DRGs for Medicine in FY18, cont.

	DRG	In Market BDOC	In Market BDOC % of Total	In and Out of Market BDOC	In and Out of Market % of Total BDOC
(V10) (655) Saginaw-Michigan	Other	352	50.6%	391	49.1%
	Total	696	100.0%	797	100.0%



## VISN 10: Eastern Michigan Market

## Demand ► Top Medicine DRGs in the Community and Outside of the Market

	DRG	FY18 BDOC	% of Total BDOC
VA Care Outside of the Market	(291) HEART FAILURE & SHOCK W MCC	294	4.1%
	(871) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	242	3.4%
	(292) HEART FAILURE & SHOCK W CC	206	2.9%
	(641) MISC DISORDERS OF NUTRITION,METABOLISM,FLUIDS/ELECTROLYTES W/O MCC	204	2.8%
	(603) CELLULITIS W/O MCC	179	2.5%
	(690) KIDNEY & URINARY TRACT INFECTIONS W/O MCC	161	2.2%
	(189) PULMONARY EDEMA & RESPIRATORY FAILURE	156	2.2%
	(281) ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W CC	153	2.1%
	(392) ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC	148	2.1%
	(280) ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W MCC	133	1.8%
	Other	5,315	73.9%
	<b>Total</b>	<b>7,191</b>	<b>100.0%</b>
Care in the Community	(871) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	468	10.0%
	(291) HEART FAILURE & SHOCK W MCC	345	7.3%
	(280) ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W MCC	182	3.9%
	(286) CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W MCC	120	2.6%
	(64) INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W MCC	112	2.4%
	(65) INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC OR TPA IN 24 HRS	107	2.3%
	(208) RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT <=96 HOURS	102	2.2%
	(190) CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	100	2.1%
	(870) SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS	100	2.1%
	(189) PULMONARY EDEMA & RESPIRATORY FAILURE	96	2.0%
	Other	2,970	63.2%
	<b>Total</b>	<b>4,702</b>	<b>100.0%</b>

Note: Enrollees enrolled in a market and received care at a facility outside of their market

Source: 1. VSSC Treating Specialty Cube 2. VHA Office of Community Care

4.13.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Demand ► Top DRGs for Surgery in FY18

	DRG	In Market BDOC	In Market BDOC % of Total	In and Out of Market BDOC	In and Out of Market % of Total BDOC
(V10) (553) Detroit-Michigan	O (470) Major Joint Replacement Or Reattachment Of Lower Extremity W/o Mcc	266	8.5%	404	11.6%
	O (853) Infectious & Parasitic Diseases W O.r. Procedure W Mcc	246	7.9%	246	7.1%
	O (981) Extensive O.r. Procedure Unrelated To Principal Diagnosis W Mcc	124	4.0%	124	3.6%
	O (3) Ecmo Or Trach W Mv 96+ Hrs Or Pdx Exc Face, Mouth & Neck W Maj O.r.	119	3.8%	119	3.4%
	O (330) Major Small & Large Bowel Procedures W Cc	117	3.7%	117	3.4%
	O (240) Amputation For Circ Sys Disorders Exc Upper Limb & Toe W Cc	108	3.4%	108	3.1%
	O (329) Major Small & Large Bowel Procedures W Mcc	83	2.7%	94	2.7%
	O (331) Major Small & Large Bowel Procedures W/o Cc/mcc	75	2.4%	84	2.4%
	O (354) Hernia Procedures Except Inguinal & Femoral W Cc	61	1.9%	75	2.2%
	O (253) Other Vascular Procedures W Cc	71	2.3%	71	2.0%
	Other	1,862	59.5%	2,032	58.5%
	<b>Total</b>	<b>3,132</b>	<b>100.0%</b>	<b>3,474</b>	<b>100.0%</b>



## VISN 10: Eastern Michigan Market

## Demand ► Top Surgery DRGs in the Community and Outside of the Market

	DRG	FY18 BDOC	% of Total BDOC
VA Care Outside of the Market	(330) MAJOR SMALL & LARGE BOWEL PROCEDURES W CC	193	7.3%
	(236) CORONARY BYPASS W/O CARDIAC CATH W/O MCC	179	6.7%
	(470) MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	132	5.0%
	(254) OTHER VASCULAR PROCEDURES W/O CC/MCC	74	2.8%
	(331) MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC/MCC	69	2.6%
	(981) EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	69	2.6%
	(4) TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	58	2.2%
	(617) AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS W CC	58	2.2%
	(406) PANCREAS, LIVER & SHUNT PROCEDURES W CC	53	2.0%
	(674) OTHER KIDNEY & URINARY TRACT PROCEDURES W CC	44	1.7%
	Other	1,728	65.0%
Total		2,657	100.0%
Care in the Community	(853) INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	413	10.0%
	(3) ECMO OR TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	264	6.4%
	(247) PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC	161	3.9%
	(215) OTHER HEART ASSIST SYSTEM IMPLANT	127	3.1%
	(234) CORONARY BYPASS W CARDIAC CATH W/O MCC	117	2.8%
	(4) TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	115	2.8%
	(470) MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	103	2.5%
	(270) OTHER MAJOR CARDIOVASCULAR PROCEDURES W MCC	90	2.2%
	(981) EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	80	1.9%
	(219) CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH W MCC	75	1.8%
	Other	2,571	62.5%
Total		4,116	100.0%

Note: Enrollees enrolled in a market and received care at a facility outside of their market

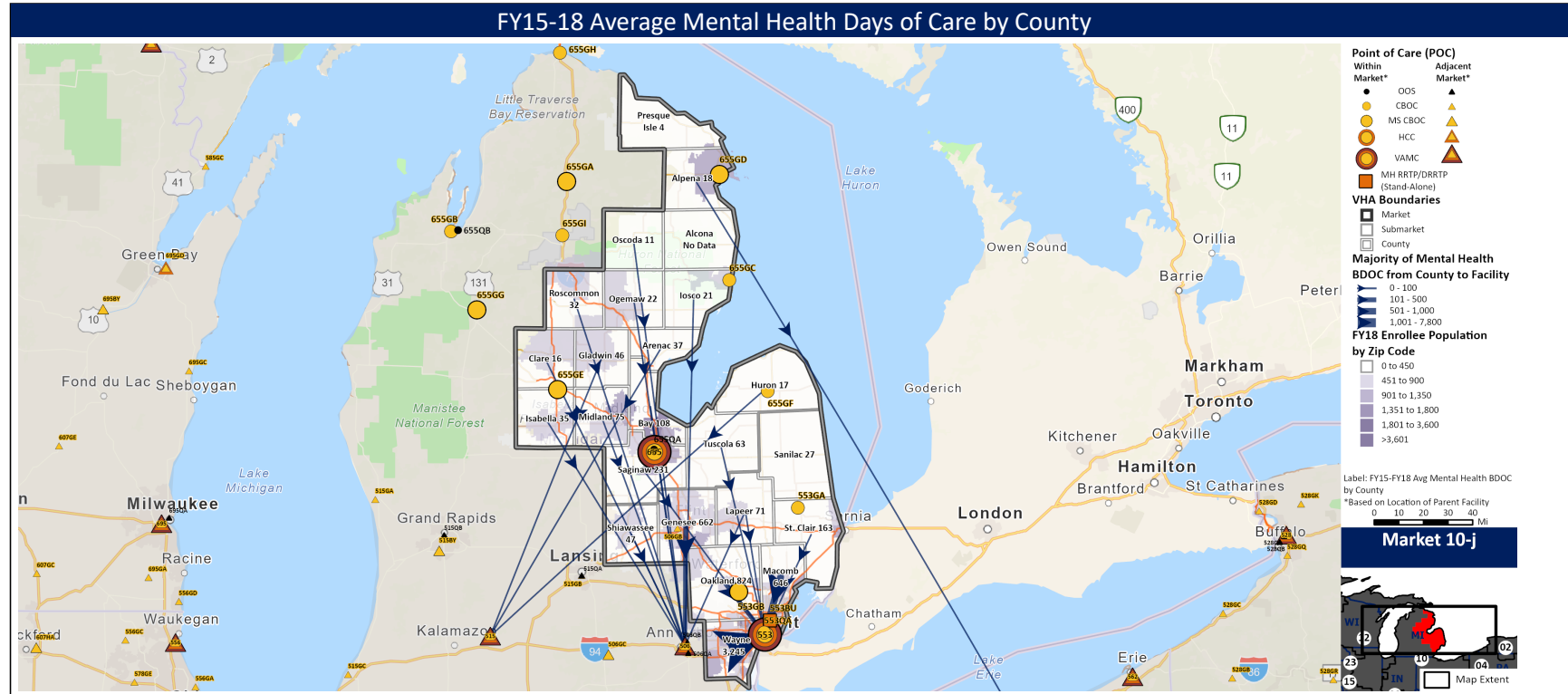
Source: 1. VSSC Treating Specialty Cube 2. VHA Office of Community Care

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## VISN 10: Eastern Michigan Market

## Demand ► Mental Health BDOC – FY15-18



Source: 1. VSSC Treating Specialty Cube 2. Geocoded Enrollee File FY18Q4

4.4.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Demand ► Mental Health BDOC – FY15-18, cont.

County	FY18 BDOC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Alpena, MI	7	18	(V04) (646) Pittsburgh	85.7%
Arenac, MI	10	38	(V10) (515) Battle Creek	100.0%
Bay, MI	64	109	(V10) (506) Ann Arbor-Michigan	51.6%
Clare, MI	7	16	(V10) (506) Ann Arbor-Michigan	57.1%
Genesee, MI	551	662	(V10) (506) Ann Arbor-Michigan	62.8%
Gladwin, MI	59	46	(V10) (515) Battle Creek	37.3%
Huron, MI	1	18	(V10) (515) Battle Creek	100.0%
Iosco, MI	18	22	(V10) (506) Ann Arbor-Michigan	94.4%
Isabella, MI	27	35	(V10) (506) Ann Arbor-Michigan	81.5%
Lapeer, MI	34	71	(V10) (506) Ann Arbor-Michigan	29.4%
Macomb, MI	615	647	(V10) (553) Detroit-Michigan	81.0%
Midland, MI	52	76	(V10) (506) Ann Arbor-Michigan	63.5%
Oakland, MI	888	825	(V10) (553) Detroit-Michigan	48.4%
Ogemaw, MI	16	22	(V10) (506) Ann Arbor-Michigan	81.3%
Oscoda, MI	32	11	(V10) (506) Ann Arbor-Michigan	100.0%
Presque Isle, MI	N/A	5	(V06) (659) Salisbury	N/A
Roscommon, MI	46	32	(V10) (506) Ann Arbor-Michigan	91.3%
Saginaw, MI	205	232	(V10) (553) Detroit-Michigan	21.5%
Saint Clair, MI	125	163	(V10) (553) Detroit-Michigan	41.6%
Sanilac, MI	N/A	27	(V10) (506) Ann Arbor-Michigan	N/A





## VISN 10: Eastern Michigan Market

**Demand** ► **Mental Health BDOC – FY15-18, cont.**

County	FY18 BDOC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Shiawassee, MI	39	47	(V10) (506) Ann Arbor-Michigan	53.8%
Tuscola, MI	16	63	(V10) (553) Detroit-Michigan	56.3%
Wayne, MI	3,289	3,246	(V10) (553) Detroit-Michigan	67.1%
Total	6,101	6,429		



## VISN 10: Eastern Michigan Market

## Demand ► Top DRGs for Mental Health in FY18

	DRG	In Market BDOC	In Market BDOC % of Total	In and Out of Market BDOC	In and Out of Market % of Total BDOC
(V10) (553) Detroit-Michigan	N (885) Psychoses	2248	80.3%	2713	79.4%
	N (882) Neuroses except depressive	137	4.9%	217	6.4%
	O (880) Acute Adjustment Reaction & Psychosocial Dysfunction	176	6.3%	193	5.7%
	N (881) Depressive neuroses	111	4.0%	149	4.4%
	O (884) Organic Disturbances & Mental Retardation	108	3.9%	117	3.4%
	O (883) Disorders Of Personality & Impulse Control	10	0.4%	18	0.5%
	N (887) Other mental disorder diagnoses	8	0.3%	8	0.2%
	Total	2798	100.0%	3415	100.0%
(V10) (655) Saginaw-Michigan	O (884) Organic Disturbances & Mental Retardation	5	50.0%	9	64.3%
	N (885) Psychoses	5	50.0%	5	35.7%
	Total	10	100.0%	14	100.0%



## VISN 10: Eastern Michigan Market

## Demand ► Top Mental Health DRGs in the Community and Outside of the Market

	DRG	FY18 BDOC	% of Total BDOC
VA Care Outside of the Market	(885) PSYCHOSES	1,587	64.4%
	(881) DEPRESSIVE NEUROSES	317	12.9%
	(882) NEUROSES EXCEPT DEPRESSIVE	299	12.1%
	(884) ORGANIC DISTURBANCES & INTELLECTUAL DISABILITY	143	5.8%
	(880) ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	73	3.0%
	(883) DISORDERS OF PERSONALITY & IMPULSE CONTROL	37	1.5%
	(887) OTHER MENTAL DISORDER DIAGNOSES	5	0.2%
	(886) BEHAVIORAL & DEVELOPMENTAL DISORDERS	3	0.1%
	<b>Total</b>	<b>2,464</b>	<b>100.0%</b>
Care in the Community	(885) PSYCHOSES	376	88.3%
	(882) NEUROSES EXCEPT DEPRESSIVE	21	4.9%
	(884) ORGANIC DISTURBANCES & INTELLECTUAL DISABILITY	14	3.3%
	(880) ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	8	1.9%
	(881) DEPRESSIVE NEUROSES	7	1.6%
	<b>Total</b>	<b>426</b>	<b>100.0%</b>

\*Enrollees enrolled in a market and received care at a facility outside of their market

Source: 1. VSSC Treating Specialty Cube 2. VHA Office of Community Care

4.15.V10.EasternMichigan



## VISN 10: Eastern Michigan Market – Detroit-Michigan

## Demand ► Community Care (Inpatient)

FY16-18 Medicine NVCC (ADC)				
Vendor	FY16	FY17	FY18	
VHS HARPER HUTZEL HOSPITAL INC	0.4	0.9	2.2	
VHS DETROIT RECEIVING HOSPITALS INC	0.1	0.2	0.3	
HENRY FORD HEALTH SYSTEMS	0.1	0.1	1.0	
MCLAREN PORT HURON HOSPITAL	0.0	0.1	0.5	
All Other Vendors	0.5	1.4	1.7	
Community Total (ADC)	1.2	2.7	5.7	

FY16-18 Surgery NVCC (ADC)				
Vendor	FY16	FY17	FY18	
HENRY FORD HEALTH SYSTEMS	0.3	0.1	0.6	
VHS DETROIT RECEIVING HOSPITALS INC	0.1	0.3	0.5	
VHS HARPER HUTZEL HOSPITAL INC	1.4	1.7	2.1	
All Other Vendors	0.7	1.1	1.6	
Community Total (ADC)	2.5	3.1	4.8	

FY16-18 Psych NVCC (ADC)				
Vendor	FY16	FY17	FY18	
HENRY FORD WYANDOTTE HOSPITAL	N/A	N/A	0.0	
All Other Vendors	N/A	0.1	0.1	
Community Total (ADC)	N/A	0.1	0.2	



## VISN 10: Eastern Michigan Market – Saginaw-Michigan

## Demand ► Community Care (Inpatient)

FY16-18 Medicine NVCC (ADC)			
Vendor	FY16	FY17	FY18
ST MARYS MEDICAL CENTER	0.2	0.5	0.4
BAY MEDICAL CENTER	0.2	0.2	0.3
NORTHERN MICHIGAN HOSPITAL	0.2	0.3	0.5
MID MICHIGAN REG MED CTR	0.2	0.2	0.5
MUNSON MEDICAL CENTER	1.1	1.3	1.1
COVENANT PHYSICIANS	4.6	4.7	4.5
All Other Vendors	1.5	1.7	1.5
Community Total (ADC)	8.1	8.9	8.8

FY16-18 Surgery NVCC (ADC)			
Vendor	FY16	FY17	FY18
MUNSON MEDICAL CENTER	0.6	1.0	1.5
MID MICHIGAN REG MED CTR	0.2	0.3	0.4
ST MARYS MEDICAL CENTER	0.2	0.2	0.6
NORTHERN MICHIGAN HOSPITAL	0.1	0.3	0.6
REGENTS OF UNIVERSITY OF MICHIGA...	0.1	0.3	0.5
BAY MEDICAL CENTER	0.1	0.1	0.5
COVENANT PHYSICIANS	2.3	2.0	2.9
All Other Vendors	0.5	0.4	1.1
Community Total (ADC)	4.2	4.6	8.1

FY16-18 Psych NVCC (ADC)			
Vendor	FY16	FY17	FY18
MUNSON MEDICAL CENTER	0.1	0.1	0.3
MID MICHIGAN REG MED CTR	0.1	0.0	0.2
BAY MEDICAL CENTER	0.1	0.1	0.2
MEMORIAL HEALTHCARE CENTER	0.0	0.1	0.2
MIDMICHIGAN MEDICAL CENTER	N/A	N/A	0.1
ALPENA GENERAL HOSPITAL	0.1	0.1	0.1
ST MARYS HLTH SVCS	0.0	N/A	0.1
HEALTHSOURCE SAGINAW	N/A	0.0	0.0
HURLEY MEDICAL CENTER	0.1	0.0	0.0
All Other Vendors	0.1	0.2	0.1
Community Total (ADC)	0.5	0.5	1.4



## VISN 10: Eastern Michigan Market

## Demand ► NVCC FY16-18 – Inpatient BDOC

Sector/ County Name		Medicine				Surgery			Mental Health		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
10-j-1-A	Alcona, MI	626	37	32	49	N/A	32	63	N/A	1	N/A
10-j-1-A	Alpena, MI	1,277	67	54	53	30	6	66	31	5	1
10-j-1-A	Iosco, MI	1,379	63	114	119	38	26	170	N/A	N/A	N/A
10-j-1-A	Oscoda, MI	350	48	32	48	10	15	41	N/A	N/A	N/A
10-j-1-A	Presque Isle, MI	684	21	11	32	11	28	29	8	4	N/A
	Sector Subtotal	4,316	236	243	301	89	107	369	39	10	1
10-j-1-B	Clare, MI	1,397	96	51	86	35	76	84	22	6	17
10-j-1-B	Gladwin, MI	1,102	150	71	33	26	45	69	N/A	6	N/A
10-j-1-B	Isabella, MI	1,143	16	56	118	46	25	114	11	21	15
10-j-1-B	Roscommon, MI	1,208	70	113	100	13	42	61	11	N/A	N/A
	Sector Subtotal	4,850	332	291	337	120	188	328	44	33	32
10-j-1-C	Arenac, MI	641	29	14	8	8	7	77	N/A	N/A	N/A
10-j-1-C	Bay, MI	3,259	179	207	198	87	66	178	15	3	54
10-j-1-C	Midland, MI	2,188	78	101	195	55	102	116	28	4	43
10-j-1-C	Ogemaw, MI	888	108	165	85	34	55	49	N/A	3	26
	Sector Subtotal	6,976	394	487	486	184	230	420	43	10	123
10-j-1-D	Huron, MI	1,038	22	20	85	6	19	49	N/A	7	14
10-j-1-D	Saginaw, MI	5,674	627	844	740	305	240	457	18	30	73
10-j-1-D	Tuscola, MI	1,744	72	100	175	59	56	83	N/A	5	7
	Sector Subtotal	8,456	721	964	1,000	370	315	589	18	42	94
10-j-2-A	Genesee, MI	8,816	404	388	314	304	253	261	32	21	58
10-j-2-A	Lapeer, MI	2,053	64	58	75	90	42	46	N/A	6	N/A
10-j-2-A	Shiawassee, MI	1,820	69	48	30	86	66	46	N/A	5	4
	Sector Subtotal	12,689	537	494	419	480	361	353	32	32	62
10-j-2-B	Saint Clair, MI	4,709	23	64	190	51	62	73	N/A	18	16
10-j-2-B	Sanilac, MI	1,363	66	35	103	48	25	73	2	N/A	11

Source: VHA Office of Community Care

4.12.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

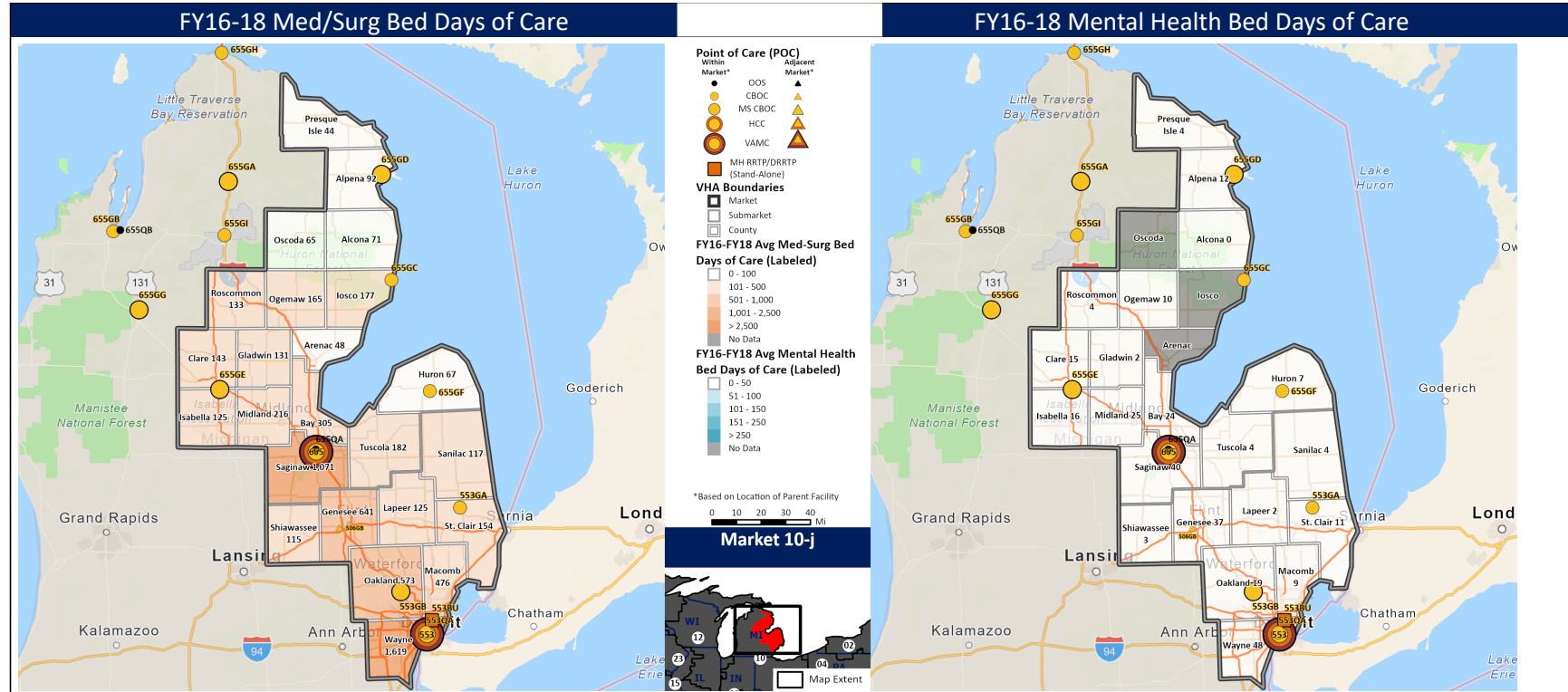
## Demand ► NVCC FY16-18 – Inpatient BDOC, cont.

Sector/ County Name			Medicine			Surgery			Mental Health		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
	Sector Subtotal	6,072	89	99	293	99	87	146	2	18	27
10-j-2-C	Oakland, MI	18,090	215	248	353	321	215	367	4	14	39
	Sector Subtotal	18,090	215	248	353	321	215	367	4	14	39
10-j-2-D	Macomb, MI	15,662	68	162	335	217	215	432	6	13	9
	Sector Subtotal	15,662	68	162	335	217	215	432	6	13	9
10-j-2-E	Wayne, MI	35,426	337	722	1,178	614	895	1,112	55	49	39
	Sector Subtotal	35,426	337	722	1,178	614	895	1,112	55	49	39
Market Total		112,537	2,929	3,710	4,702	2,494	2,613	4,116	243	221	426



## VISN 10: Eastern Michigan Market

## Demand ► NVCC FY16-18 – Inpatient Utilization Patterns



Source: VHA Office of Community Care

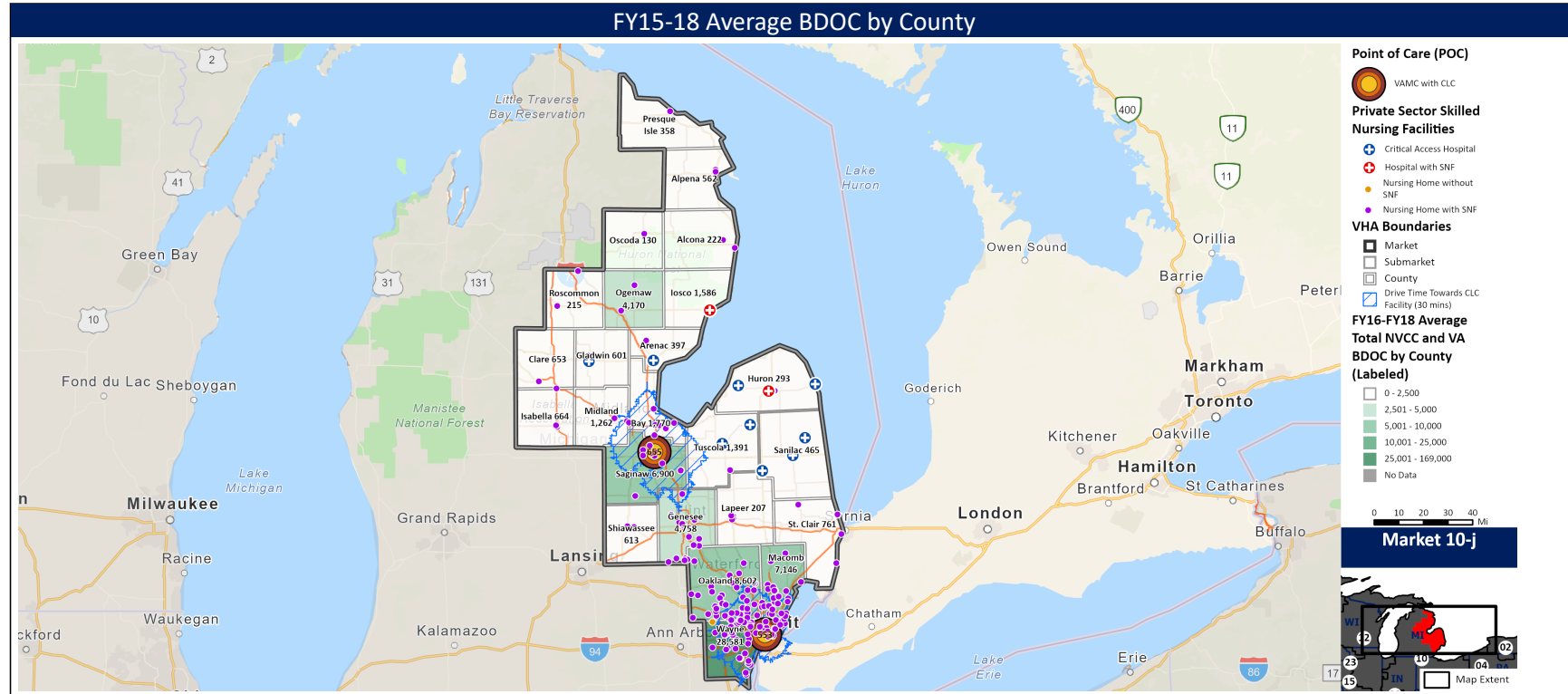
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## VISN 10: Eastern Michigan Market

## Demand ► Nursing Home BDOC Distribution



Note: Data is only for fee basis and does not encompass all Community Care

Source: 1. VSSC Treating Specialty Cube 2. VSSC NVCC Cube 3. Definitive HC

4.7.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Demand ► Nursing Home BDOC Distribution, cont.

County	FY18 Non-VA Community Care*	FY18 VA	FY18 Total BDOC
Alcona, MI	326	16	342
Alpena, MI	955	66	1,021
Arenac, MI	121	130	251
Bay, MI	1,132	1,044	2,176
Clare, MI		652	652
Genesee, MI	4,201	1,902	6,103
Gladwin, MI	596	309	905
Huron, MI	584	90	674
Iosco, MI	1,295	227	1,522
Isabella, MI		237	237
Lapeer, MI	29	284	313
Macomb, MI	3,566	4,432	7,998
Midland, MI	579	759	1,338
Oakland, MI	3,977	4,861	8,838
Ogemaw, MI	2,779	198	2,977
Oscoda, MI	125	52	177
Presque Isle, MI	315	23	338
Roscommon, MI	43	77	120
Saginaw, MI	4,387	3,515	7,902
Saint Clair, MI	442	71	513

\*Data is only for fee basis and does not encompass all Community Care

Source: 1. VSSC Treating Specialty Cube 2. VSSC NVCC Cube 3. Definitive HC

4.7.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

**Demand** ► **Nursing Home BDOC Distribution, cont.**

County	FY18 Non-VA Community Care*	FY18 VA	FY18 Total BDOC
Sanilac, MI	396	414	810
Shiawassee, MI	391	140	531
Tuscola, MI	1,148	695	1,843
Wayne, MI	17,476	13,689	31,165
Total	44,863	33,882	78,745

\*Data is only for fee basis and does not encompass all Community Care

Source: 1. VSSC Treating Specialty Cube 2. VSSC NVCC Cube 3. Definitive HC

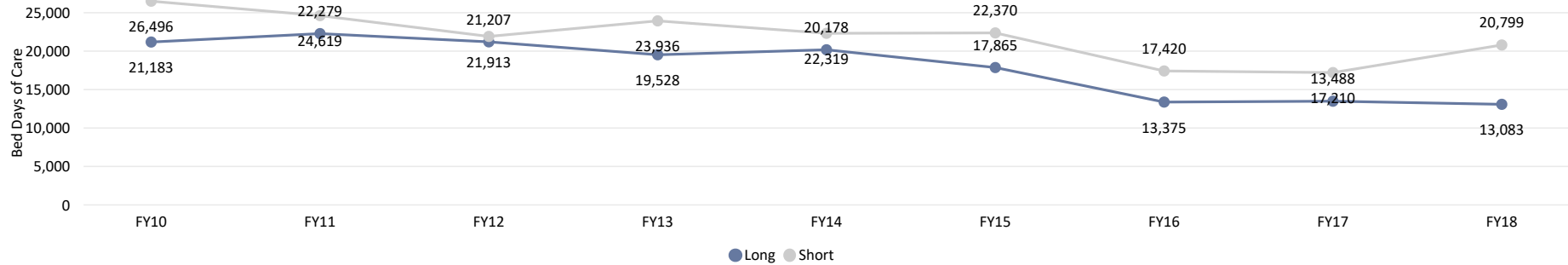
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## VISN 10: Eastern Michigan Market

## Demand ► In-House LTSS Short Stays vs. Long Stays BDOC

FY10-18 Long Stay BDOC vs. Short Stay BDOC



FY10-18 Long Stay BDOC vs. Short Stay BDOC

Stay	Age	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	% Change
Long	< 40	17	351	0	20	0	0	0	0	0	-100.0%
	40-54	1,027	1,401	366	655	377	19	0	7	0	-100.0%
	55-64	5,029	5,082	5,994	3,512	3,840	2,007	1,656	1,749	2,147	-57.3%
	65-79	7,658	7,946	5,650	8,379	9,996	10,592	8,159	8,762	7,904	3.2%
	80+	7,452	7,500	9,182	6,962	5,965	5,247	3,560	2,970	3,032	-59.3%
Total Long		21,183	22,279	21,207	19,528	20,178	17,865	13,375	13,488	13,083	-38.2%
Short	< 40	212	139	35	20	4	50	32	0	107	-49.5%
	40-54	2,536	1,428	1,292	1,833	1,357	1,276	542	882	1,179	-53.5%
	55-64	7,575	8,141	6,880	6,145	5,772	4,473	3,911	3,650	4,433	-41.5%
	65-79	8,098	8,336	8,065	8,168	8,500	8,637	8,825	9,216	10,079	24.5%
	80+	7,904	6,485	5,599	7,694	6,672	7,930	4,111	3,432	4,926	-37.7%
Total Short		26,496	24,619	21,913	23,936	22,319	22,370	17,420	17,210	20,799	-21.5%

Source: VSSC Treating Specialty Cube

4.8.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Demand ► Community Nursing Home vs. In-House BDOC

VA (In-House)				
Facility	Operating Beds Reported in the PTF Cube	Operating Beds Reported by the Field	FY18 ADC	NVCC, FY18 ADC**
(V10) (553) Detroit-Michigan	109	60	51.8	59.4
(V10) (553BU) Detroit Domiciliary	N/A	N/A	N/A	N/A
(V10) (655) Saginaw-Michigan	81	81	28.7	79.9
Total	190	141	80.5	139.3

Community Statistics***				
Facility	Operating Beds	FY18 ADC	Occupancy	Potential Available Beds*
(V10) (553) Detroit-Michigan	27,221	22,111.0	81.2%	3,749
(V10) (655) Saginaw-Michigan	1,816	1,394.0	77.6%	331

\*Potential Available Beds is defined as Operating Beds less ADC based on a 95% occupancy

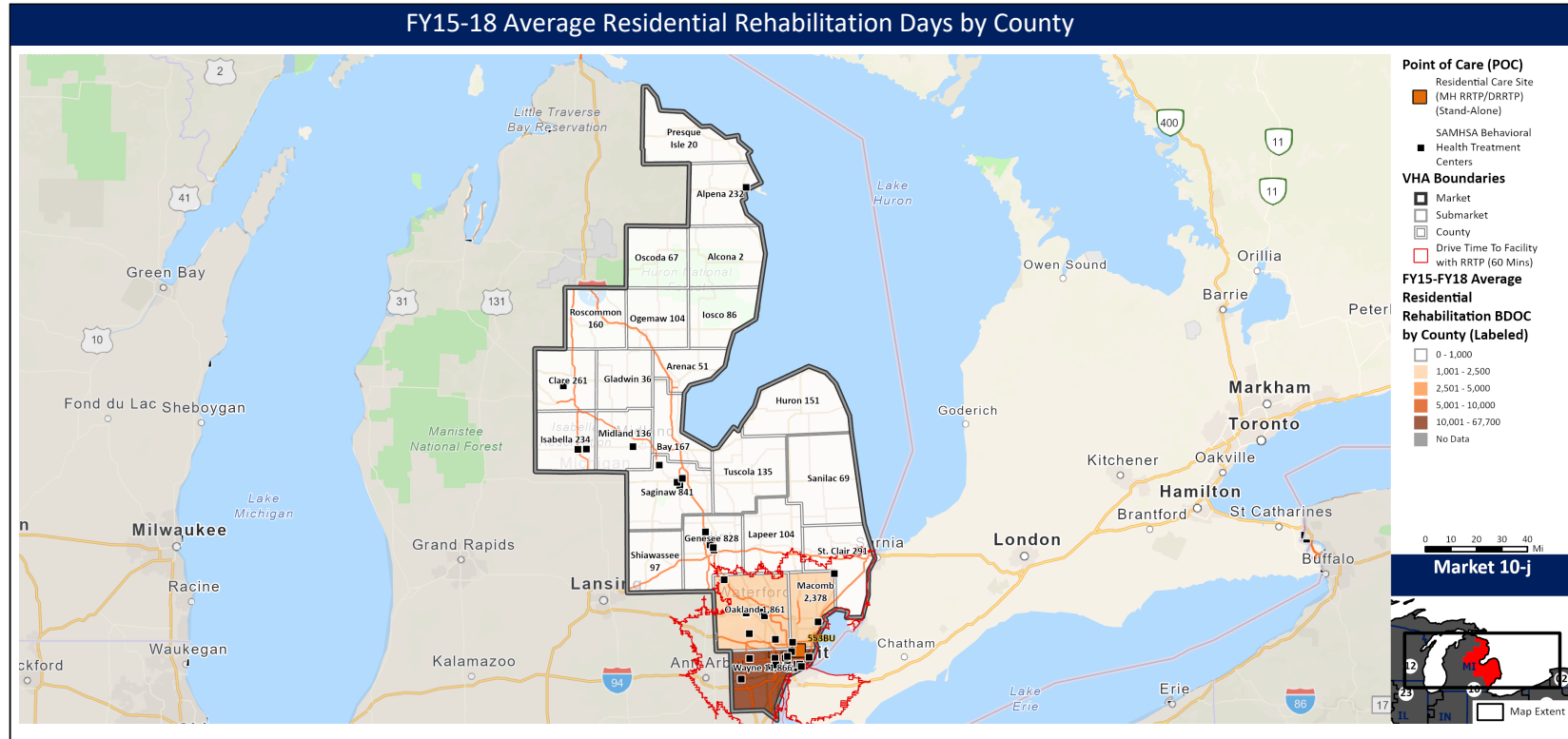
\*\*Data is only for fee basis and does not encompass all Community Care

\*\*\*SNFs within a 30 minute drive time of facility. Does not include SNFs in which the ADC overly exceeded operating beds (>30%) as it indicates a coding issue



## VISN 10: Eastern Michigan Market

## Demand ► Residential Rehab BDOC



Source: VSSC Treating Specialty Cube; Substance Abuse and Mental Health Services Administration (SAMHSA) (2018)

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## VISN 10: Eastern Michigan Market

## Demand ► Residential Rehab BDOC, cont.

Care Received in a VAMC/VA Facility (not limited to VA Facilities in the market)				
Top 10 Market Counties	FY15 BDOC	FY16 BDOC	FY17 BDOC	FY18 BDOC
Wayne, MI	13,553	12,686	9,906	11,318
Macomb, MI	1,930	2,431	2,358	2,792
Oakland, MI	1,031	1,604	3,044	1,764
Saginaw, MI	456	857	966	1,085
Genesee, MI	926	1,270	484	630
Saint Clair, MI	326	101	244	495
Midland, MI	99	44	52	349
Clare, MI	175	132	478	259
Lapeer, MI	51	42	74	250
Ogemaw, MI	158	27	5	228

Source: VSSC Treating Specialty Cube; Substance Abuse and Mental Health Services Administration (SAMHSA) (2018)

4.10.V10.EasternMichigan



## VISN 10: Eastern Michigan Market – Detroit-Michigan

## Demand ► Surgical Cases FY15-18 – Detroit-Michigan

Facility	Setting	Specialty	FY15	FY16	FY17	FY18	FY15-18 % Chg
(V10) (553) Detroit-Michigan	Inpatient	EAR, NOSE, THROAT (ENT)	11	23	17	17	54.5%
		GENERAL SURGERY	407	431	364	420	3.2%
		OB/GYN	4	5	14	30	650.0%
		OPHTHALMOLOGY	11	5	11	7	-36.4%
		ORAL SURGERY	1	1	2	N/A	-100.0%
		ORTHOPEDICS	239	235	222	211	-11.7%
		PERIPHERAL VASCULAR	68	118	179	206	202.9%
		PLASTIC SURGERY	21	26	18	25	19.0%
		PODIATRY	49	36	34	50	2.0%
		THORACIC SURGERY	37	41	43	36	-2.7%
		UROLOGY	126	55	81	116	-7.9%
		<b>Inpatient Total</b>	<b>974</b>	<b>976</b>	<b>985</b>	<b>1,118</b>	<b>14.8%</b>
	Outpatient	ANESTHESIOLOGY	2	1	N/A	N/A	-100.0%
		EAR, NOSE, THROAT (ENT)	225	218	193	168	-25.3%
		GENERAL SURGERY	629	590	577	584	-7.2%
		OB/GYN	9	26	74	65	622.2%
		OPHTHALMOLOGY	674	679	627	685	1.6%
		ORAL SURGERY	42	23	22	28	-33.3%
		ORTHOPEDICS	139	180	126	92	-33.8%
		PERIPHERAL VASCULAR	36	40	51	75	108.3%
		PLASTIC SURGERY	201	263	310	293	45.8%
		PODIATRY	76	103	96	73	-3.9%

Source: VSSC OR Productivity Cube

4.11.V10.EasternMichigan.553





## VISN 10: Eastern Michigan Market – Detroit-Michigan

## Demand ► Surgical Cases FY15-18 – Detroit-Michigan, cont.

Facility	Setting	Specialty	FY15	FY16	FY17	FY18	FY15-18 % Chg
(V10) (553) Detroit-Michigan	Outpatient	THORACIC SURGERY	13	10	7	5	-61.5%
		UROLOGY	274	93	223	293	6.9%
		Outpatient Total	2,320	2,226	2,306	2,361	1.8%
Facility Total	Total		3,294	3,202	3,291	3,479	5.6%



## VISN 10: Eastern Michigan Market – Saginaw-Michigan

## Demand ► Surgical Cases FY15-18 – Saginaw-Michigan

Facility	Setting	Specialty	FY15	FY16	FY17	FY18	FY15-18 % Chg
(V10) (655) Saginaw-Michigan	Inpatient	GENERAL SURGERY	20	7	5	1	-95.0%
		UROLOGY	1	1	4	4	300.0%
		Inpatient Total	21	8	9	5	-76.2%
	Outpatient	GENERAL SURGERY	1,651	1,730	1,347	1,440	-12.8%
		OB/GYN	N/A	N/A	3	26	N/A
		PODIATRY	N/A	3	22	48	N/A
		UROLOGY	354	499	486	439	24.0%
		Outpatient Total	2,005	2,232	1,858	1,953	-2.6%
Facility Total	Total		2,026	2,240	1,867	1,958	-3.4%



**Demand ▶ Estimated Future Market Demand — Inpatient**

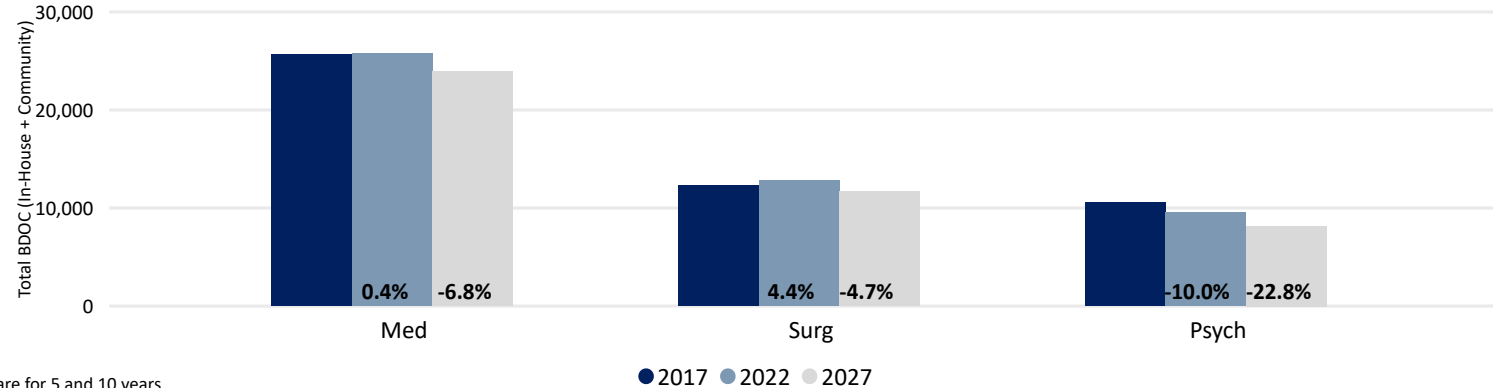


## VISN 10: Eastern Michigan Market

## Demand ► BY17 Market Utilization Projections (Acute Inpatient) — Eastern Michigan Market

BY17 VISN 10 Eastern Michigan Market Utilization Projections BDOC									
	FY17			FY22			FY27		
	Med	Surg	Psych	Med	Surg	Psych	Med	Surg	Psych
In-House BDOC	20,008	7,831	9,927	19,936	8,101	8,937	18,367	7,383	7,670
Community BDOC	5,664	4,439	652	5,850	4,704	585	5,548	4,310	496
<b>Total BDOC</b>	<b>25,672</b>	<b>12,270</b>	<b>10,579</b>	<b>25,786</b>	<b>12,805</b>	<b>9,522</b>	<b>23,915</b>	<b>11,693</b>	<b>8,166</b>
ADC By HSPG	70.0	33.6	29.0	71.0	35.1	26.0	66.0	32.0	22.0
<b>Total ADC</b>	<b>132.9</b>			<b>131.8</b>			<b>119.9</b>		
<b>Total Bed Need*</b>	<b>156</b>			<b>155</b>			<b>141</b>		

\*Total Bed Need is based on a 85% occupancy rate



Note: Percent changes are for 5 and 10 years

Source: BY17 EHCPM Utilization Projections

5.1.V10.EasternMichigan

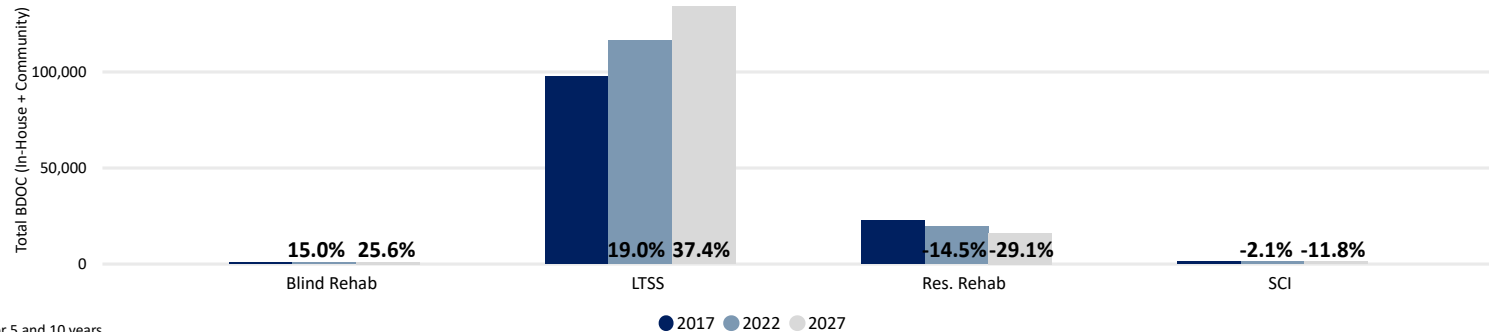


## VISN 10: Eastern Michigan Market

Demand ► **BY17 Market Utilization Projections (Other Inpatient) — Eastern Michigan Market**

BY17 VISN 10 Eastern Michigan Market Utilization Projections BDOC												
	FY17				FY22				FY27			
	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI
ADC By HSPG	2.3	267.8	62.4	4.0	2.7	318.7	53.3	4.0	2.9	367.9	44.2	3.6
Total BDOC	847	97,734	22,762	1,476	974	116,334	19,464	1,445	1,064	134,280	16,136	1,302
Community BDOC	0	60,764	0	0	0	77,251	0	0	0	94,656	0	0
In-House BDOC	847	36,970	22,762	1,476	974	39,083	19,463	1,445	1,064	39,624	16,136	1,302
Total ADC	336.5				378.7				418.6			
Total Bed Need*	362				405				446			

\*Total Bed Need is based on a 95% occupancy for LTSS and 85% occupancy for blind rehab, residential rehab, and SCI



Note: Percent changes are for 5 and 10 years

Source: BY17 EHCPM Utilization Projections

5.2.V10.EasternMichigan

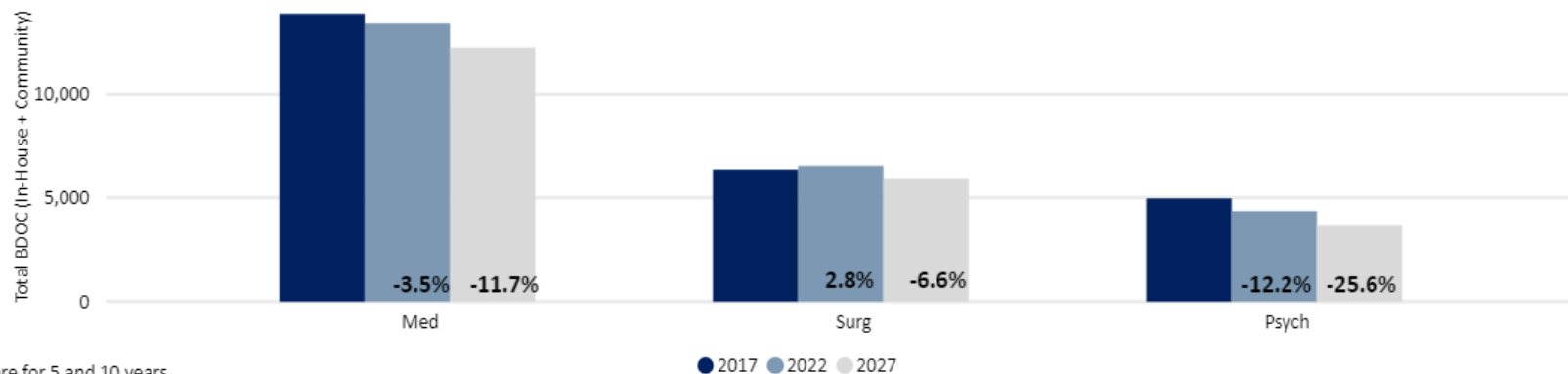


## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► BY17 Parent Facility Utilization Projections (Acute Inpatient) — Detroit-Michigan VAMC

BY17 Detroit-Michigan VAMC Utilization Projections BDOC									
	FY17			FY22			FY27		
	Med	Surg	Psych	Med	Surg	Psych	Med	Surg	Psych
In-House BDOC	11,645	4,422	4,809	11,245	4,527	4,229	10,280	4,112	3,589
Community BDOC	2,228	1,936	155	2,148	2,010	129	1,969	1,825	105
<b>Total BDOC</b>	<b>13,873</b>	<b>6,358</b>	<b>4,964</b>	<b>13,393</b>	<b>6,537</b>	<b>4,359</b>	<b>12,249</b>	<b>5,937</b>	<b>3,693</b>
ADC By HSPG	38.0	17.4	13.6	36.7	17.9	11.9	33.6	16.3	10.1
<b>Total ADC</b>	<b>69.0</b>			<b>66.5</b>			<b>59.9</b>		
<b>Total Bed Need*</b>	<b>81</b>			<b>78</b>			<b>71</b>		

\*Total bed need is based on an 85% occupancy rate



Note: Percent changes are for 5 and 10 years

Source: BY17 EHCPM Utilization Projections

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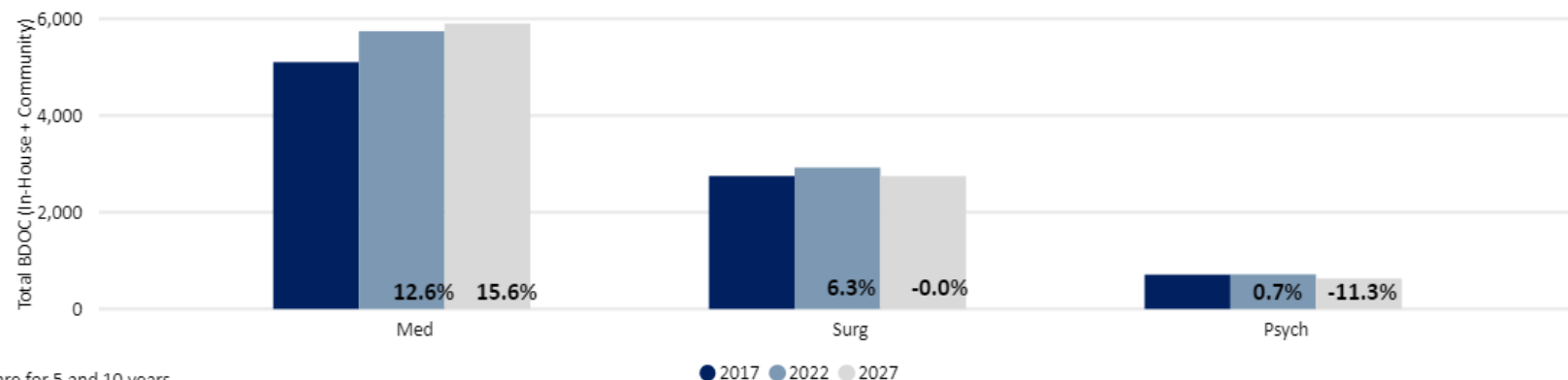


## VISN 10: Eastern Michigan Market — Saginaw-Michigan

Demand ► **BY17 Parent Facility Utilization Projections (Acute Inpatient) — Saginaw-Michigan VAMC**

BY17 Saginaw-Michigan VAMC Utilization Projections BDOC									
	FY17			FY22			FY27		
	Med	Surg	Psych	Med	Surg	Psych	Med	Surg	Psych
In-House BDOC	1,252		252	1,393		243	1,417		188
Community BDOC	3,854	2,751	458	4,354	2,925	472	4,487	2,750	442
<b>Total BDOC</b>	<b>5,106</b>	<b>2,751</b>	<b>710</b>	<b>5,747</b>	<b>2,925</b>	<b>715</b>	<b>5,905</b>	<b>2,750</b>	<b>630</b>
ADC By HSPG	14.0	7.5	1.9	15.7	8.0	2.0	16.2	7.5	1.7
<b>Total ADC</b>	<b>23.5</b>			<b>25.7</b>			<b>25.4</b>		
<b>Total Bed Need*</b>	<b>28</b>			<b>30</b>			<b>30</b>		

\*Total bed need is based on an 85% occupancy rate



Note: Percent changes are for 5 and 10 years

Source: BY17 EHCPM Utilization Projections

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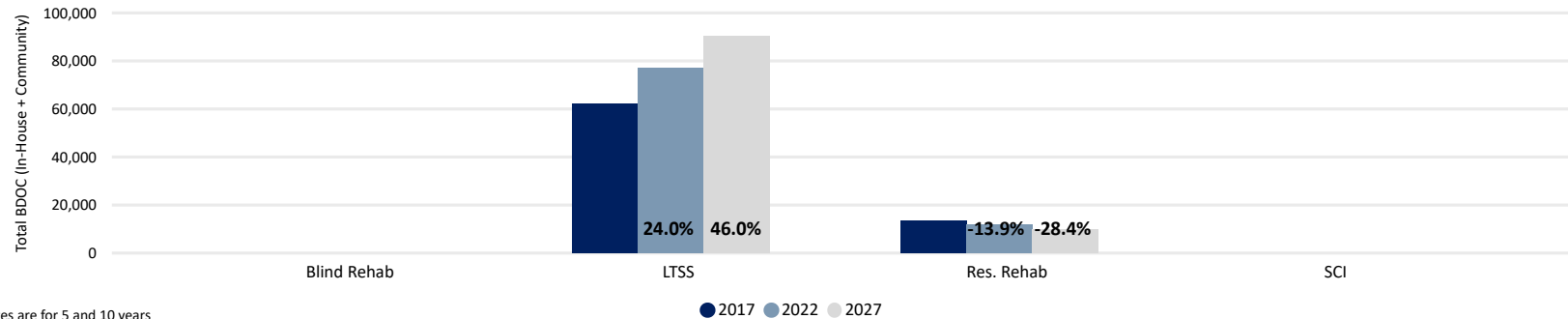


## VISN 10: Eastern Michigan Market — Detroit-Michigan

Demand ► **BY17 Parent Facility Utilization Projections (Other Inpatient) — Detroit-Michigan VAMC**

BY17 Detroit-Michigan VAMC Utilization Projections BDOC												
	FY17				FY22				FY27			
	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI
In-House BDOC	N/A	19,702	13,685	N/A	N/A	20,560	11,777	N/A	N/A	20,916	9,803	N/A
Community BDOC	N/A	42,319	N/A	N/A	N/A	56,374	N/A	N/A	N/A	69,646	N/A	N/A
<b>Total BDOC</b>	<b>N/A</b>	<b>62,021</b>	<b>13,685</b>	<b>N/A</b>	<b>N/A</b>	<b>76,935</b>	<b>11,777</b>	<b>N/A</b>	<b>N/A</b>	<b>90,562</b>	<b>9,803</b>	<b>N/A</b>
ADC By HSPG	N/A	169.9	37.5	N/A	N/A	210.8	32.3	N/A	N/A	248.1	26.9	N/A
<b>Total ADC</b>	<b>207.4</b>				<b>243.0</b>				<b>275.0</b>			
<b>Total Bed Need*</b>	<b>223</b>				<b>260</b>				<b>293</b>			

\*Total bed need is based on a 95% occupancy for LTSS and 85% occupancy for Blind rehab, residential rehab, and SCI





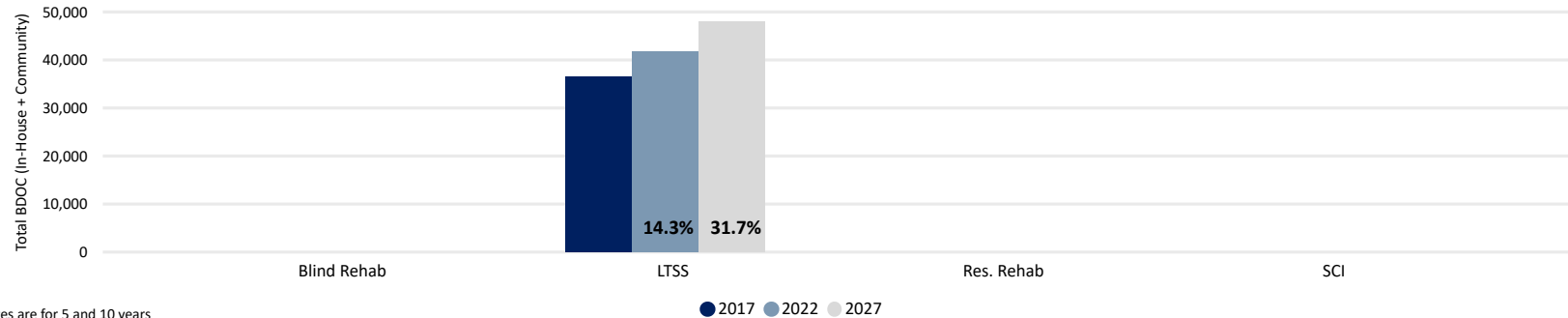


## VISN 10: Eastern Michigan Market — Saginaw-Michigan

Demand ► **BY17 Parent Facility Utilization Projections (Other Inpatient) — Saginaw-Michigan VAMC**

BY17 Saginaw-Michigan VAMC Utilization Projections BDOC												
	FY17				FY22				FY27			
	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI
In-House BDOC	N/A	12,265	N/A	N/A	N/A	13,379	N/A	N/A	N/A	13,572	N/A	N/A
Community BDOC	N/A	24,250	N/A	N/A	N/A	28,372	N/A	N/A	N/A	34,522	N/A	N/A
<b>Total BDOC</b>	<b>N/A</b>	<b>36,515</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>41,750</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>48,095</b>	<b>N/A</b>	<b>N/A</b>
ADC By HSPG	N/A	100.0	N/A	N/A	N/A	114.4	N/A	N/A	N/A	131.8	N/A	N/A
<b>Total ADC</b>	<b>100.0</b>				<b>114.4</b>				<b>131.8</b>			
<b>Total Bed Need*</b>	<b>105</b>				<b>120</b>				<b>139</b>			

\*Total bed need is based on a 95% occupancy for LTSS and 85% occupancy for Blind rehab, residential rehab, and SCI





## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Demand ► Overall Inpatient Commercial Demand – Detroit-Michigan Area

## • Overview:

- ✓ Commercial market inpatient demand estimates were developed to understand current and future expected inpatient demand trends for non-Veteran populations
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Total Inpatient Bed Days of Care (BDOC)			Growth Projections (#,%)			
	2018	2023	2028	5 Year Chg	5 Year % Chg	10 Year Chg	10 Year % Chg
General Medicine	309,600	359,877	404,832	50,277	16.2%	95,232	30.8%
Nephrology	135,208	150,442	164,372	15,234	11.3%	29,164	21.6%
Hematology	35,305	36,524	37,455	1,219	3.5%	2,150	6.1%
Neurology	209,952	225,950	239,759	15,998	7.6%	29,807	14.2%
Rheumatology	8,685	8,518	8,161	-167	-1.9%	-524	-6.0%
Gastroenterology	208,825	210,473	218,365	1,648	0.8%	9,540	4.6%
Pulmonary	270,703	266,628	258,290	-4,075	-1.5%	-12,413	-4.6%
Dermatology	45,589	44,908	46,903	-681	-1.5%	1,314	2.9%
Oncology Medical	75,513	75,274	75,704	-239	-0.3%	191	0.3%
Cardiology	360,519	342,159	318,892	-18,360	-5.1%	-41,627	-11.5%
HIV	2,853	2,558	2,393	-295	-10.3%	-460	-16.1%
Endocrine	55,174	42,898	39,020	-12,276	-22.2%	-16,154	-29.3%
Medicine Sub-Total	1,717,926	1,766,209	1,814,146	48,283	2.8%	96,220	5.6%
Neurosurgery	36,115	36,683	37,070	568	1.6%	955	2.6%
Orthopedics	275,042	261,918	242,565	-13,124	-4.8%	-32,477	-11.8%
Open Heart	64,229	65,364	66,834	1,135	1.8%	2,605	4.1%
Ophthalmology	2,413	2,349	2,346	-64	-2.7%	-67	-2.8%
Vascular Surgery	37,410	36,418	35,789	-992	-2.7%	-1,621	-4.3%
General Surgery	290,913	294,069	301,864	3,156	1.1%	10,951	3.8%
Thoracic Surgery	89,606	88,588	87,210	-1,018	-1.1%	-2,396	-2.7%
Trauma	16,460	15,892	15,216	-568	-3.5%	-1,244	-7.6%
Dentistry	1,964	1,795	1,605	-169	-8.6%	-359	-18.3%
Urology	32,748	31,175	31,852	-1,573	-4.8%	-896	-2.7%
Otolaryngology	11,297	8,360	7,019	-2,937	-26.0%	-4,278	-37.9%
Surgery Sub-Total	858,197	842,611	829,370	-15,586	-1.8%	-28,827	-3.4%
Medicine/Surgery Total	2,576,123	2,608,820	2,643,516	32,697	1.3%	67,393	2.6%
OB/Delivery	139,578	129,492	122,535	-10,086	-7.2%	-17,043	-12.2%
Other OB	11,075	9,907	9,240	-1,168	-10.5%	-1,835	-16.6%
Gynecology	11,520	7,736	6,498	-3,784	-32.8%	-5,022	-43.6%
Women's Health Total	162,173	147,135	138,273	-15,038	-9.3%	-23,900	-14.7%
Psych/Drug Abuse	234,117	254,765	275,764	20,648	8.8%	41,647	17.8%
Mental Health Total	234,117	254,765	275,764	20,648	8.8%	41,647	17.8%
Acute Rehab	5,045	3,591	2,582	-1,454	-28.8%	-2,463	-48.8%
Rehab Total	5,045	3,591	2,582	-1,454	-28.8%	-2,463	-48.8%
Other Total	165	163	162	-2	-1.2%	-3	-1.8%
Grand Total	2,977,623	3,014,474	3,060,297	36,851	1.2%	82,674	2.8%

Source: IBM Market Expert

5.5.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Demand ► Overall Inpatient Commercial Demand – Saginaw-Michigan Area

## • Overview:

- ✓ Commercial market inpatient demand estimates were developed to understand current and future expected inpatient demand trends for non-Veteran populations
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Total Inpatient Bed Days of Care (BDOC)			Growth Projections (#,%)			
	2018	2023	2028	5 Year Chg	5 Year % Chg	10 Year Chg	10 Year % Chg
General Medicine	75,174	84,654	92,252	9,480	12.6%	17,078	22.7%
Nephrology	31,961	34,296	36,211	2,335	7.3%	4,250	13.3%
Hematology	7,830	7,878	7,865	48	0.6%	35	0.4%
Neurology	49,333	51,330	52,720	1,997	4.0%	3,387	6.9%
Rheumatology	2,057	1,947	1,803	-110	-5.3%	-254	-12.3%
Gastroenterology	50,079	48,765	48,837	-1,314	-2.6%	-1,242	-2.5%
Dermatology	11,240	10,710	10,775	-530	-4.7%	-465	-4.1%
Oncology Medical	17,421	16,820	16,395	-601	-3.4%	-1,026	-5.9%
Pulmonary	65,339	61,985	57,885	-3,354	-5.1%	-7,454	-11.4%
Cardiology	84,977	77,814	70,125	-7,163	-8.4%	-14,852	-17.5%
HIV	510	453	417	-57	-11.2%	-93	-18.2%
Endocrine	13,295	10,139	8,965	-3,156	-23.7%	-4,330	-32.6%
Medicine Sub-Total	409,216	406,791	404,250	-2,425	-0.6%	-4,966	-1.2%
Neurosurgery	8,409	8,269	8,091	-140	-1.7%	-318	-3.8%
Orthopedics	65,785	60,279	53,772	-5,506	-8.4%	-12,013	-18.3%
Open Heart	15,249	14,911	14,703	-338	-2.2%	-546	-3.6%
General Surgery	69,269	67,923	67,518	-1,346	-1.9%	-1,751	-2.5%
Ophthalmology	553	522	507	-31	-5.6%	-46	-8.3%
Vascular Surgery	8,856	8,329	7,901	-527	-6.0%	-955	-10.8%
Trauma	3,843	3,612	3,361	-231	-6.0%	-482	-12.5%
Thoracic Surgery	20,936	20,070	19,157	-866	-4.1%	-1,779	-8.5%
Dentistry	453	404	351	-49	-10.8%	-102	-22.5%
Urology	7,789	7,164	7,060	-625	-8.0%	-729	-9.4%
Otolaryngology	2,596	1,874	1,529	-722	-27.8%	-1,067	-41.1%
Surgery Sub-Total	203,738	193,357	183,950	-10,381	-5.1%	-19,788	-9.7%
Medicine/Surgery Total	612,954	600,148	588,200	-12,806	-2.1%	-24,754	-4.0%
OB/Delivery	31,828	29,819	28,256	-2,009	-6.3%	-3,572	-11.2%
Other OB	2,489	2,261	2,117	-228	-9.2%	-372	-14.9%
Gynecology	2,511	1,657	1,364	-854	-34.0%	-1,147	-45.7%
Women's Health Total	36,828	33,737	31,737	-3,091	-8.4%	-5,091	-13.8%
Psych/Drug Abuse	59,585	63,392	66,723	3,807	6.4%	7,138	12.0%
Mental Health Total	59,585	63,392	66,723	3,807	6.4%	7,138	12.0%
Acute Rehab	1,336	944	672	-392	-29.3%	-664	-49.7%
Rehab Total	1,336	944	672	-392	-29.3%	-664	-49.7%
Other Total	46	45	44	-1	-2.2%	-2	-4.3%
Grand Total	710,749	698,266	687,376	-12,483	-1.8%	-23,373	-3.3%

Source: IBM Market Expert

5.5.V10.EasternMichigan.655



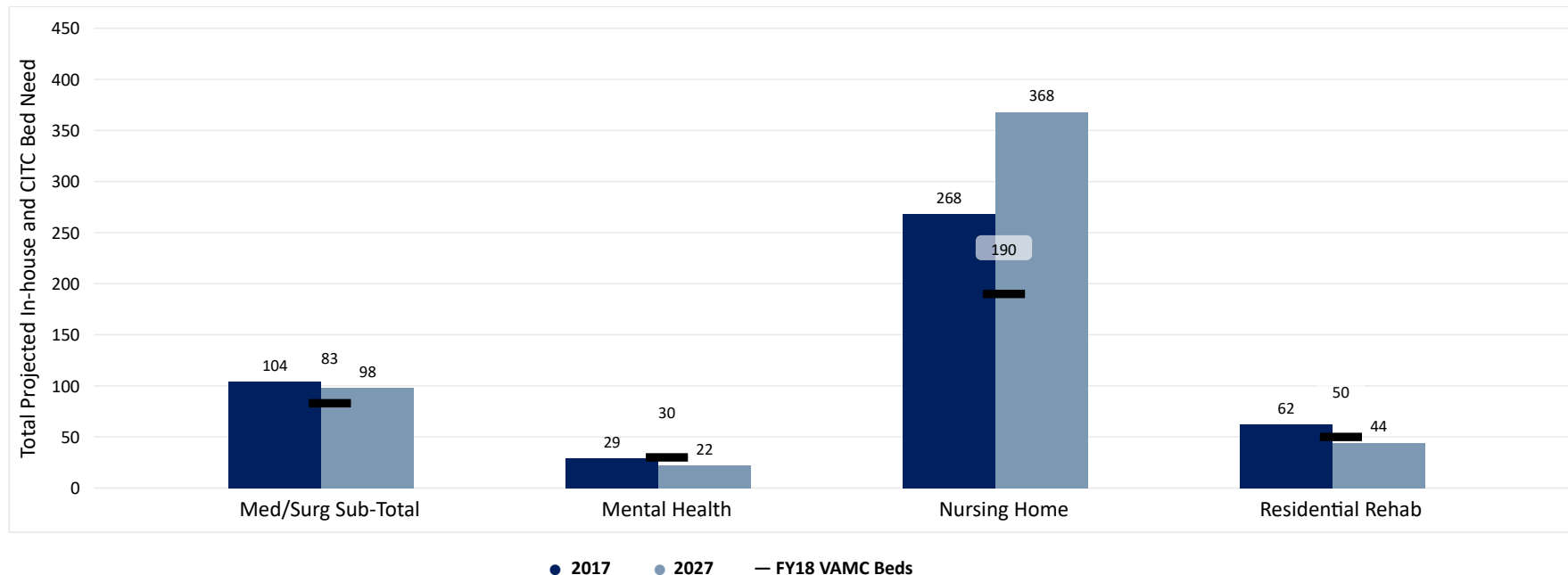
**Supply** ▶ **Estimated Current Total VA Market Supply**



## VISN 10: Eastern Michigan Market

## Supply ► Comparing Total Market Veteran Demand vs. VA Medical Center Supply — Inpatient Services

Veteran Inpatient Projected Demand and VA Supply

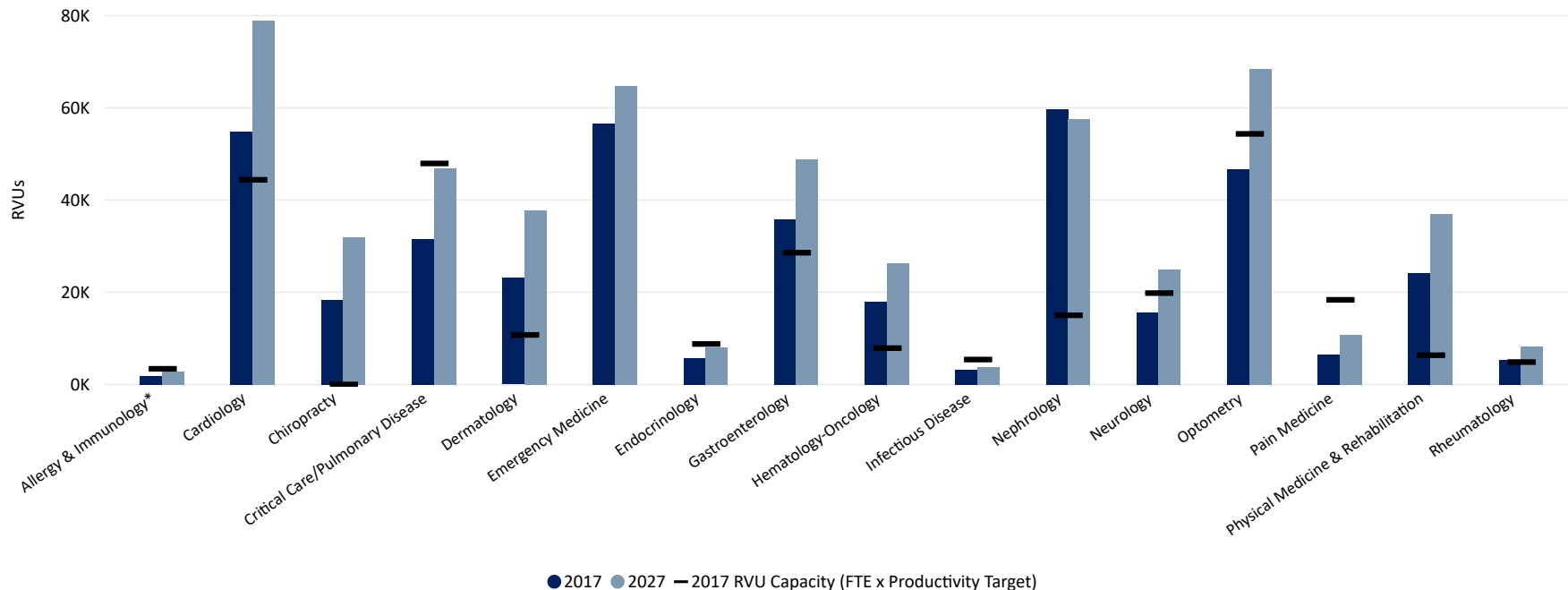




## VISN 10: Eastern Michigan Market

**Supply ▶ Comparing Total Market Veteran Demand vs. VA Medical Center Supply — Outpatient Services — Ambulatory Medical Specialties (HSPCs)**

Ambulatory Medical (HSPCs)



\* Reflects service is not provided in-house or there is no VA set productivity target

Source: 1. BY17 EHCPM Utilization Projections 2. OPES Physician Capacity Reports 3. VSSC Physician Productivity Cube 4. VSSC MPCR3 Cube

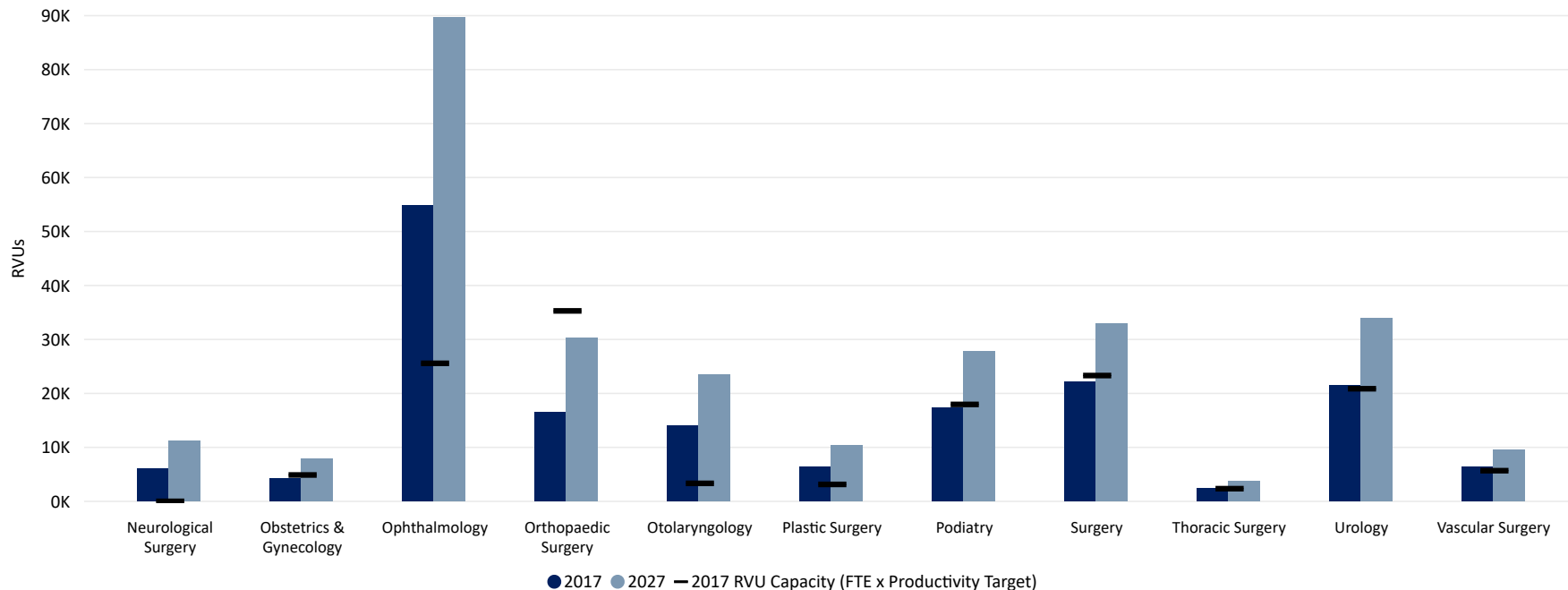
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## VISN 10: Eastern Michigan Market

**Supply** ▶ **Comparing Total Market Veteran Demand vs. VA Medical Center Supply — Outpatient Services — Ambulatory Surgical Specialties (HSPCs)**

Ambulatory Surgical (HSPCs)



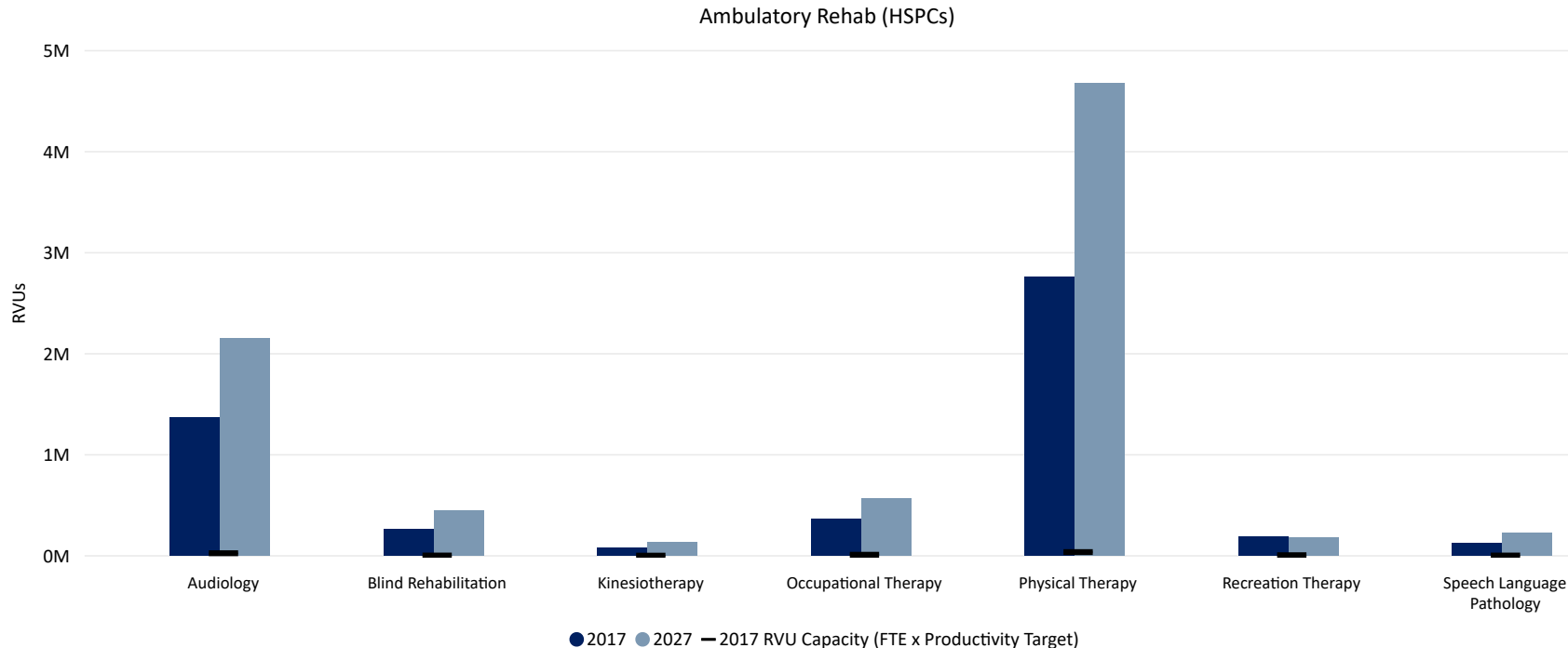
\* Reflects service is not provided in-house or there is no VA set productivity target

Source: 1. BY17 EHCPM Utilization Projections 2. OPES Physician Capacity Reports 3. VSSC Physician Productivity Cube 4. VSSC MPCR3 Cube

6.3.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

**Supply ▶ Comparing Total Market Veteran Demand vs. VA Medical Center Supply — Outpatient Services — Ambulatory Rehab Specialties (HSPCs)**

\* Reflects service is not provided in-house or there is no VA set productivity target

Source: 1. BY17 EHCPM Utilization Projections 2. OPES Physician Capacity Reports 3. VSSC Rehab Productivity Cube 4. VSSC MPCR3 Cube

6.4.V10.EasternMichigan





## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Physician Efficiency — Detroit-Michigan VAMC

Specialty	SPARQ Quadrant 2016	SPARQ Quadrant 2017	SPARQ Quadrant 2018	2016 MD FTEs	2017 MD FTEs	2018 MD FTEs	2016 APP FTEs	2017 APP FTEs	2018 APP FTEs
Allergy and Immunology	4 - Over Resourced	4 - Over Resourced	4 - Over Resourced	0.7	1.0	0.9	N/A	N/A	N/A
Anesthesiology	N/A	N/A	N/A	N/A	N/A	N/A	7.7	7.7	7.7
Cardiology	2 - Under Resourced	2 - Under Resourced	N/A	2.2	3.0	3.0	8.8	9.0	6.9
Critical Care / Pulmonary Disease	2 - Under Resourced	N/A	1 - Optimized Practice	5.6	5.4	5.7	6.4	5.2	6.6
Dermatology	2 - Under Resourced	2 - Under Resourced	1 - Optimized Practice	2.1	1.7	2.3	0.0	0.0	0.0
Emergency Medicine	N/A	N/A	N/A	6.0	6.4	4.7	12.2	11.2	11.6
Endocrinology	3 - Inefficient	4 - Over Resourced	N/A	0.4	0.7	0.6	3.0	3.0	3.0
Gastroenterology	2 - Under Resourced	N/A	4 - Over Resourced	2.2	2.7	2.3	2.3	4.0	6.1
Geriatric Medicine	N/A	N/A	N/A	1.0	0.4	1.2	0.3	0.3	0.5
Hematology-Oncology	1 - Optimized Practice	2 - Under Resourced	N/A	2.4	1.4	1.9	1.7	1.6	1.7
Infectious Disease	2 - Under Resourced	N/A	N/A	1.1	1.1	1.0	0.0	0.0	0.0
Internal Medicine	1 - Optimized Practice	1 - Optimized Practice	1 - Optimized Practice	27.7	28.3	30.8	39.9	37.2	32.9
Nephrology	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	1.7	1.6	1.5	3.0	3.0	5.2
Neurology	4 - Over Resourced	N/A	4 - Over Resourced	2.2	2.3	2.3	2.8	2.5	2.4
Obstetrics & Gynecology	4 - Over Resourced	N/A	N/A	0.7	1.0	0.7	0.2	0.5	0.4
Ophthalmology	1 - Optimized Practice	1 - Optimized Practice	N/A	2.8	3.2	3.8	0.0	0.0	0.0
Optometry	4 - Over Resourced	4 - Over Resourced	4 - Over Resourced	6.3	6.7	5.7	0.0	0.0	0.0
Orthopaedic Surgery	4 - Over Resourced	4 - Over Resourced	4 - Over Resourced	1.3	1.5	1.7	14.8	14.2	14.7
Otolaryngology	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	1.1	0.7	0.8	0.0	0.0	0.0
Pain Medicine	3 - Inefficient	1 - Optimized Practice	4 - Over Resourced	1.2	0.9	0.9	6.7	6.3	6.1



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Physician Efficiency — Detroit-Michigan VAMC, cont.

Specialty	SPARQ Quadrant 2016	SPARQ Quadrant 2017	SPARQ Quadrant 2018	2016 MD FTEs	2017 MD FTEs	2018 MD FTEs	2016 APP FTEs	2017 APP FTEs	2018 APP FTEs
Pathology	N/A	N/A	N/A	2.0	2.1	2.4	0.1	0.1	0.0
Physical Medicine & Rehabilitation	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	1.2	1.1	1.2	0.1	0.1	0.0
Plastic Surgery	1 - Optimized Practice	1 - Optimized Practice	1 - Optimized Practice	0.7	0.7	0.7	N/A	N/A	N/A
Podiatry	3 - Inefficient	N/A	N/A	2.0	2.1	1.9	0.0	0.0	0.0
Primary Care	4 - Over Resourced	4 - Over Resourced	1 - Optimized Practice	N/A	N/A	N/A	N/A	N/A	N/A
Psychiatry	N/A	1 - Optimized Practice	1 - Optimized Practice	14.1	14.1	13.9	N/A	N/A	N/A
Psychiatry/Psychology	N/A	N/A	N/A	N/A	N/A	N/A	12.1	11.7	13.8
Psychology	N/A	4 - Over Resourced	1 - Optimized Practice	15.0	18.1	17.3	N/A	N/A	N/A
Radiology	N/A	N/A	N/A	6.5	6.2	6.4	2.7	2.4	2.3
Rheumatology	N/A	4 - Over Resourced	1 - Optimized Practice	1.4	1.5	1.4	0.1	0.1	0.1
Surgery	1 - Optimized Practice	2 - Under Resourced	2 - Under Resourced	1.7	1.8	2.1	1.1	0.6	2.6
Thoracic Surgery	4 - Over Resourced	4 - Over Resourced	N/A	0.4	0.4	0.1	0.0	0.0	0.0
Urology	1 - Optimized Practice	2 - Under Resourced	1 - Optimized Practice	0.7	1.9	1.7	2.9	2.8	2.5
Vascular Surgery	3 - Inefficient	2 - Under Resourced	2 - Under Resourced	1.8	0.9	1.1	0.3	0.3	0.3
Total				116.3	121.0	121.8	129.6	124.0	127.7



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Physician Efficiency — Saginaw-Michigan VAMC

Specialty	SPARQ Quadrant 2016	SPARQ Quadrant 2017	SPARQ Quadrant 2018	2016 MD FTEs	2017 MD FTEs	2018 MD FTEs	2016 APP FTEs	2017 APP FTEs	2018 APP FTEs
Anesthesiology	N/A	N/A	N/A	N/A	N/A	N/A	2.2	5.1	4.7
Cardiology	1 - Optimized Practice	1 - Optimized Practice	1 - Optimized Practice	0.7	0.8	0.4	2.3	3.2	2.8
Critical Care / Pulmonary Disease	N/A	1 - Optimized Practice	N/A	0.7	0.7	0.7	1.6	2.0	1.9
Dermatology	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	N/A
Emergency Medicine	N/A	N/A	N/A	2.3	1.4	1.7	8.1	6.3	4.5
Endocrinology	N/A	N/A	N/A	N/A	N/A	N/A	0.1	0.1	0.0
Gastroenterology	3 - Inefficient	N/A	N/A	0.6	N/A	N/A	0.0	0.6	N/A
Geriatric Medicine	N/A	N/A	N/A	N/A	N/A	N/A	6.1	6.0	4.2
Infectious Disease	N/A	N/A	N/A	N/A	N/A	N/A	0.7	0.7	0.5
Internal Medicine	4 - Over Resourced	4 - Over Resourced	4 - Over Resourced	19.5	28.6	29.9	63.5	62.4	63.5
Nephrology	N/A	N/A	N/A	N/A	N/A	N/A	0.7	1.3	0.1
Neurology	3 - Inefficient	N/A	N/A	0.9	0.8	0.9	1.2	2.0	2.1
Obstetrics & Gynecology	N/A	4 - Over Resourced	4 - Over Resourced	N/A	0.5	0.6	N/A	N/A	N/A
Optometry	3 - Inefficient	3 - Inefficient	4 - Over Resourced	3.0	3.7	3.5	0.3	0.0	0.0
Pain Medicine	N/A	N/A	N/A	N/A	N/A	N/A	0.4	1.4	0.6
Pathology	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.1	0.0
Physical Medicine & Rehabilitation	N/A	4 - Over Resourced	3 - Inefficient	0.0	0.8	0.5	0.4	0.3	0.4
Podiatry	3 - Inefficient	3 - Inefficient	4 - Over Resourced	1.9	2.1	2.2	0.3	0.2	0.1
Primary Care	1 - Optimized Practice	4 - Over Resourced	4 - Over Resourced	N/A	N/A	N/A	N/A	N/A	N/A
Psychiatry	4 - Over Resourced	3 - Inefficient	3 - Inefficient	6.5	6.5	7.5	N/A	N/A	N/A



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Physician Efficiency — Saginaw-Michigan VAMC, cont.

Specialty	SPARQ Quadrant 2016	SPARQ Quadrant 2017	SPARQ Quadrant 2018	2016 MD FTEs	2017 MD FTEs	2018 MD FTEs	2016 APP FTEs	2017 APP FTEs	2018 APP FTEs
Psychiatry/Psychology	N/A	N/A	N/A	N/A	N/A	N/A	7.2	6.6	6.2
Psychology	1 - Optimized Practice	2 - Under Resourced	2 - Under Resourced	10.7	13.0	11.1	0.0	0.3	0.4
Radiology	N/A	N/A	N/A	0.9	1.0	1.6	1.7	1.7	1.6
Surgery	4 - Over Resourced	N/A	N/A	1.3	2.9	2.0	2.3	2.5	2.5
Urology	3 - Inefficient	3 - Inefficient	3 - Inefficient	1.5	0.8	1.4	1.8	2.4	0.0
Total				50.5	63.4	64.2	101.1	105.2	96.3



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Potential Physician Additional Capacity — Detroit-Michigan VAMC

Physician Specialty	Potential Additional RVU Capacity
Allergy and Immunology	809
Cardiology	-
Chiropracty	-
Critical Care / Pulmonary Disease	-
Dermatology	-
Endocrinology	514
Gastroenterology	1,557
Geriatric Medicine	-
Hematology-Oncology	210
Infectious Disease	-
Internal Medicine	-
Nephrology	-
Neurological Surgery	-
Neurology	-
Obstetrics & Gynecology	162
Ophthalmology	1,348
Optometry	3,270
Orthopaedic Surgery	1,329
Otolaryngology	-
Pain Medicine	615

Potential Additional RVU Capacity = (Productivity Standard – Productivity), N/A = Data Not Available

Source: OPES Physician Capacity Reports

6.6.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Potential Physician Additional Capacity — Detroit-Michigan VAMC, cont.

Physician Specialty	Potential Additional RVU Capacity
Pathology	866
Physical Medicine & Rehabilitation	-
Plastic Surgery	-
Podiatry	-
Psychiatry	-
Psychology	-
Radiology	-
Rheumatology	-
Surgery	-
Thoracic Surgery	271
Urology	-
Vascular Surgery	-

Potential Additional RVU Capacity = (Productivity Standard – Productivity), N/A = Data Not Available

Source: OPES Physician Capacity Reports

6.6.V10.EasternMichigan.553#2



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Potential Physician Additional Capacity — Saginaw-Michigan VAMC

Physician Specialty	Potential Additional RVU Capacity
Allergy and Immunology	-
Cardiology	-
Chiropracty	-
Critical Care / Pulmonary Disease	-
Dermatology	-
Endocrinology	-
Gastroenterology	-
Geriatric Medicine	-
Hematology-Oncology	-
Infectious Disease	-
Internal Medicine	22,119
Nephrology	-
Neurological Surgery	-
Neurology	-
Obstetrics & Gynecology	569
Ophthalmology	-
Optometry	3,754
Orthopaedic Surgery	-
Otolaryngology	-
Pain Medicine	-

Potential Additional RVU Capacity = (Productivity Standard – Productivity), N/A = Data Not Available

Source: OPES Physician Capacity Reports

6.6.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Potential Physician Additional Capacity — Saginaw-Michigan VAMC, cont.

Physician Specialty	Potential Additional RVU Capacity
Pathology	-
Physical Medicine & Rehabilitation	180
Plastic Surgery	-
Podiatry	1,710
Psychiatry	8,655
Psychology	-
Radiology	2,316
Rheumatology	-
Surgery	1,838
Thoracic Surgery	-
Urology	1,233
Vascular Surgery	-

Potential Additional RVU Capacity = (Productivity Standard – Productivity), N/A = Data Not Available

Source: OPES Physician Capacity Reports

6.6.V10.EasternMichigan.655#2





## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Physicians by Outpatient Clinical Category

FY18 Detroit-Michigan VAMC & CBOC Physicians by Outpatient Clinical Category					
VA Facility	Primary Care*	Specialty Care	Emergency Care	Mental Health	Total
(V10) (553) Detroit-Michigan	29.3	45.2	4.7	30.8	110.1
(V10) (553BU) Detroit Domiciliary	0.0	0.0	0.0	0.2	0.2
(V10) (553GB) Pontiac	2.6	0.0	0.0	0.0	2.6
(V10) (553QA) Piquette Street	0.0	0.0	0.0	0.2	0.2

\*Primary Care includes Internal Medicine and Geriatric Medicine

Note: Contract clinics do not have FTEs represented.

Source: VSSC Physician Productivity Cube

6.7.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Physicians by Outpatient Clinical Category

FY18 Saginaw-Michigan VAMC & CBOC Physicians by Outpatient Clinical Category					
VA Facility	Primary Care*	Specialty Care	Emergency Care	Mental Health	Total
(V10) (655) Saginaw-Michigan	16.8	12.4	1.7	3.9	34.8
(V10) (655GA) Gaylord - (V10) MichErie	2.3	0.0	0.0	0.9	3.2
(V10) (655GB) Traverse City - (V10) MichErie	2.5	0.0	0.0	0.8	3.3
(V10) (655GC) Oscoda	1.3	0.0	0.0	0.0	1.3
(V10) (655GD) Alpena	1.7	0.0	0.0	0.0	1.7
(V10) (655GE) Clare	1.6	0.0	0.0	0.0	1.6
(V10) (655GF) Bad Axe	0.9	0.0	0.0	0.0	0.9
(V10) (655GG) Cadillac - (V10) MichErie	1.3	0.0	0.0	1.5	2.8
(V10) (655GH) Cheboygan County - (V10) MichErie	0.8	0.0	0.0	0.8	1.7
(V10) (655GI) Grayling - (V10) MichErie	0.8	0.0	0.0	0.2	1.0
(V10) (655QA) Saginaw-Barnard Road	0.0	0.0	0.0	6.6	6.6
(V10) (655QB) Grand Traverse - (V10) MichErie	0.0	0.0	0.0	3.8	3.8

\*Primary Care includes Internal Medicine and Geriatric Medicine

Note: Contract clinics do not have FTEs represented.

Source: VSSC Physician Productivity Cube

6.7.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Vacant Positions

Detroit-Michigan VAMC Open FTE Positions		
Occupation	FY18	FY19*
0080 Security Administration	N/A	2.0
0083 Police	6.0	11.0
0101 Social Science	1.0	4.0
0102 Social Science Aid and Technician	3.0	1.0
0180 Psychology	3.4	2.4
0185 Social Work	15.0	14.0
0201 Human Resources Management	8.0	8.0
0203 Human Resources Assistance	1.0	6.0
0301 Miscellaneous Administration and Program	2.0	3.0
0303 Miscellaneous Clerk and Assistant	7.0	8.0
0318 Secretary	N/A	2.0
0326 Office Automation Clerical And Assistance	N/A	1.0
0341 Administrative Officer	N/A	1.0
0343 Management and Program Analysis	3.0	1.0
0382 Telephone Operating	N/A	1.0
0510 Accounting	N/A	2.0
0525 Accounting Technician	N/A	1.0
0601 General Health Science	1.5	3.5
0602 Medical Officer	12.4	13.4
0603 Physician's Assistant	1.0	N/A
0605 Nurse Anesthetist	N/A	2.0
0610 Nurse	47.2	47.5
0620 Practical Nurse	14.5	10.0
0621 Nursing Assistant	9.4	6.8
0622 Medical Supply Aide and Technician	8.0	5.0

\*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Vacant Positions, cont.

Detroit-Michigan VAMC Open FTE Positions		
Occupation	FY18	FY19*
0635Kinesiotherapy	N/A	1.0
0638 Recreation/Creative Arts Therapist	N/A	1.0
0640 Health Aid and Technician	5.4	8.0
0644 Medical Technologist	1.4	4.0
0645 Medical Technician	N/A	3.0
0646Pathology Technician	N/A	1.0
0647 Diagnostic Radiologic Technologist	3.0	2.2
0649 Medical Instrument Technician	5.5	2.0
0660 Pharmacist	1.0	4.1
0661 Pharmacy Technician	1.0	1.0
0669Medical Records Administration	N/A	1.0
0671 Health System Specialist	1.0	2.0
0675 Medical Records Technician	3.0	6.0
0679 Medical Support Assistance	22.0	23.0
0680 Dental Officer	2.3	N/A
0682Dental Hygiene	N/A	1.0
0690Industrial Hygiene	N/A	1.0
0801 General Engineering	2.0	1.0
0858 Biomedical Engineering	1.0	1.0
1101General Business And Industry	N/A	1.0
1105 Purchasing	4.0	3.0
1306Health Physics	N/A	1.0
2005 Supply Clerical and Technician	N/A	4.0
2010 Inventory Management	N/A	2.0
2102Transportation Clerk And Assistant	N/A	2.0

\*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.EasternMichigan.553#2



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Vacant Positions, cont.

Detroit-Michigan VAMC Open FTE Positions		
Occupation	FY18	FY19*
2805 Electrician	2.0	2.0
3502 Laboring	N/A	1.0
3566 Custodial Worker	8.0	13.5
4102 Painting	N/A	3.0
4749 Maintenance Mechanic	1.0	2.0
5703 Motor Vehicle Operator	N/A	1.0
7404 Cook	3.0	4.0
7408 Food Service Worker	N/A	2.0
Grand Total	209.9	261.5

\*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.EasternMichigan.553#3



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Vacant Positions

Saginaw-Michigan VAMC Open FTE Positions		
Occupation	FY18	FY19*
0060 Chaplain	0.5	N/A
0083 Police	2.0	5.0
0101 Social Science	2.0	N/A
0102 Social Science Aid and Technician	N/A	1.0
0180 Psychology	3.8	2.0
0185 Social Work	9.0	6.0
0201 Human Resources Management	1.0	1.0
0203 Human Resources Assistance	1.0	1.0
0301 Miscellaneous Administration and Program	1.0	N/A
0303 Miscellaneous Clerk and Assistant	4.0	1.0
0305 Mail and File	1.0	N/A
0318 Secretary	1.0	1.0
0340 Program Management & 0344 Management and ...	1.0	N/A
0341 Administrative Officer	N/A	1.0
0343 Management and Program Analysis	1.0	1.0
0399Administration And Office Support Student Trainee	N/A	0.5
0544 Civilian Pay	N/A	1.0
0601 General Health Science	N/A	1.0
0602 Medical Officer	6.2	7.3
0603 Physician's Assistant	N/A	1.0
0610 Nurse	16.0	17.0
0620 Practical Nurse	5.0	7.0
0621 Nursing Assistant	1.0	3.6
0622 Medical Supply Aide and Technician	1.0	2.0
0636 Rehabilitation Therapy Assistant	2.0	2.0

\*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Vacant Positions, cont.

Saginaw-Michigan VAMC Open FTE Positions		
Occupation	FY18	FY19*
0638 Recreation/Creative Arts Therapist	1.0	1.0
0640 Health Aid and Technician	3.0	N/A
0644 Medical Technologist	2.0	1.0
0645 Medical Technician	1.6	2.0
0647 Diagnostic Radiologic Technologist	0.0	N/A
0649 Medical Instrument Technician	N/A	1.0
0660 Pharmacist	1.0	4.0
0661 Pharmacy Technician	0.5	1.0
0665 Speech Pathology and Audiology	1.0	N/A
0670 Health System Administration	N/A	1.0
0671 Health System Specialist	N/A	2.0
0675 Medical Records Technician	1.0	3.0
0679 Medical Support Assistance	9.0	10.0
0699 Medical and Health Student Trainee	N/A	0.5
0801 General Engineering	2.0	N/A
1008 Interior Design	N/A	1.0
1105 Purchasing	N/A	2.0
1601 General Facilities and Equipment	2.0	2.0
1715 Vocational Rehabilitation	1.0	N/A
2005 Supply Clerical and Technician	N/A	1.0
2010 Inventory Management	N/A	2.0
3566 Custodial Worker	3.0	1.0
4204 Pipefitting	N/A	1.0
4749 Maintenance Mechanic	1.0	N/A
5402 Boiler Plant Operating	N/A	2.0

\*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.EasternMichigan.655#2



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Vacant Positions, cont.

Saginaw-Michigan VAMC Open FTE Positions		
Occupation	FY18	FY19*
7408 Food Service Worker	N/A	1.5
Grand Total	88.7	102.4

\*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.EasternMichigan.655#3



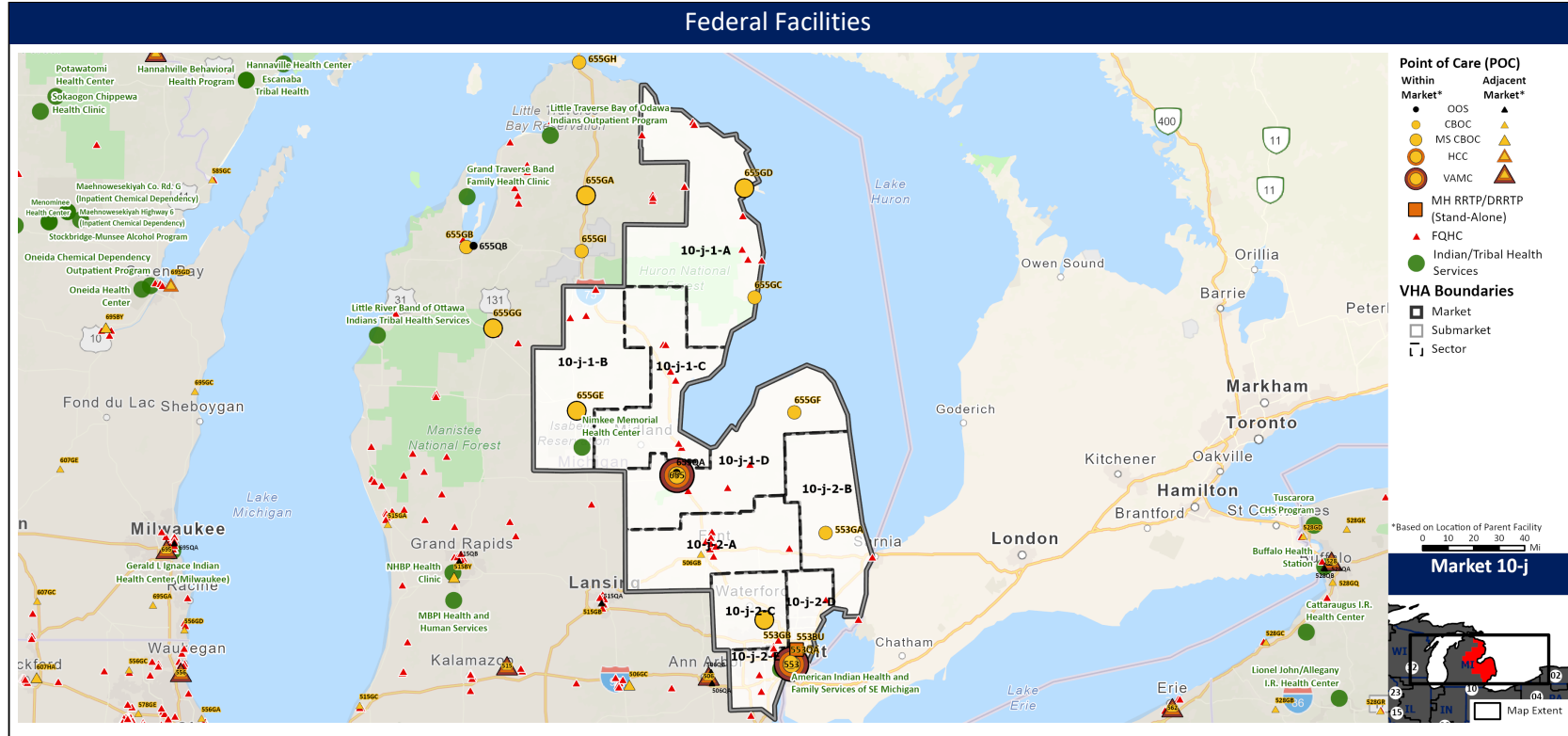


**Supply** ▶ **Estimated Current Total Community  
Market Supply**



## VISN 10: Eastern Michigan Market

## Supply ► Existing Federal Facilities



Source: 1. FQHC – HRSA Data Warehouse 2. IHS – ESRI Meta Data 3. DoD – Federal Practitioner, 2019 Directory

7.1.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Supply ► Existing Federal Facilities, cont.

Sector	Type*	Partner Facility Name**	Distance From VA POC (x miles, POC Name)
10-j-1-A	FQHC (12)	<ul style="list-style-type: none"> <li>●Thunder Bay Community Health Service - Onaway</li> <li>●Dup</li> <li>●Tendercare Health Center</li> </ul>	<ul style="list-style-type: none"> <li>●46, (V10) (655GH) Cheboygan County, MI</li> <li>●46, (V10) (655GH) Cheboygan County, MI</li> <li>●38, (V10) (655GD) Alpena, MI</li> </ul>
10-j-1-B	FQHC (4)	<ul style="list-style-type: none"> <li>●MidMichigan Health Park - Houghton Lake</li> <li>●Houghton Lake Sbhcc</li> <li>●MidMichigan Medical Offices - Roscommon</li> </ul>	<ul style="list-style-type: none"> <li>●28, (V10) (655GI) Grayling, MI</li> <li>●28, (V10) (655GI) Grayling, MI</li> <li>●20, (V10) (655GI) Grayling, MI</li> </ul>
10-j-1-B	IHS (1)	<ul style="list-style-type: none"> <li>●Nimkee Memorial Health Center</li> </ul>	<ul style="list-style-type: none"> <li>●17, (V10) (655GE) Clare, MI</li> </ul>
10-j-1-C	FQHC (6)	<ul style="list-style-type: none"> <li>●Ogemaw Clinic Of Sterling Ahc</li> <li>●Sterling Area Health Ctr Dental</li> <li>●Sterling Area Health Center</li> </ul>	<ul style="list-style-type: none"> <li>●57, (V10) (655QA) Saginaw-Barnard Road, MI</li> <li>●57, (V10) (655QA) Saginaw-Barnard Road, MI</li> <li>●43, (V10) (655QA) Saginaw-Barnard Road, MI</li> </ul>
10-j-1-D	FQHC (14)	<ul style="list-style-type: none"> <li>●Hdi Tuscola Site</li> <li>●Wolverine Human Svc-Vassar Hlth</li> <li>●Bridgeport Comm Health Center</li> </ul>	<ul style="list-style-type: none"> <li>●33, (V10) (655GF) Bad Axe, MI</li> <li>●23, (V10) (655) Saginaw-Michigan, MI</li> <li>●11, (V10) (655) Saginaw-Michigan, MI</li> </ul>
10-j-2-A	FQHC (9)	<ul style="list-style-type: none"> <li>●Hdi Lapeer Migrant Site</li> <li>●Hchn Clio Road North</li> <li>●Hchn - Dental North</li> </ul>	<ul style="list-style-type: none"> <li>●21, (V10) (553GA) Yale, MI</li> <li>●13, (V10) (506GB) Flint, MI</li> <li>●11, (V10) (506GB) Flint, MI</li> </ul>
10-j-2-B	FQHC (2)	<ul style="list-style-type: none"> <li>●Downriver Community Services, Inc.</li> <li>●Dcs Port Huron Medical Clinic</li> </ul>	<ul style="list-style-type: none"> <li>●42, (V10) (553BU) Detroit Domiciliary, MI</li> <li>●27, (V10) (553GA) Yale, MI</li> </ul>
10-j-2-C	FQHC (3)	<ul style="list-style-type: none"> <li>●Greenfield Avenue</li> <li>●Covenant Woodward Avenue</li> <li>●Oakland Primary Health Services</li> </ul>	<ul style="list-style-type: none"> <li>●10, (V10) (553QA) Piquette Street, MI</li> <li>●9, (V10) (553GB) Pontiac, MI</li> <li>●2, (V10) (553GB) Pontiac, MI</li> </ul>

\*FQHC quantity in parentheses reflects total number of FQHCs within a sector.

\*\*The three FQHCs listed reflect the three most distant FQHCs from a VA POC.

Source: 1. FQHC – HRSA Data Warehouse 2. IHS – ESRI Meta Data 3. DoD – Federal Practitioner - 2019 Directory

7.1.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Supply ► Existing Federal Facilities, cont.

Sector	Type*	Partner Facility Name**	Distance From VA POC (x miles, POC Name)
10-j-2-D	FQHC (1)	●Dcs New Haven Community Services	●27, (V10) (553BU) Detroit Domiciliary, MI
10-j-2-E	FQHC (23)	●Western Wayne Family Health Center ●The Wellness Plan, Northwest Medical Center ●The Pickens Center	●19, (V10) (553) Detroit-Michigan, MI ●10, (V10) (553QA) Piquette Street, MI ●8, (V10) (553QA) Piquette Street, MI
10-j-2-E	IHS (1)	●American Indian Health and Family Services of SE Michigan	●5, (V10) (553) Detroit-Michigan, MI

\*FQHC quantity in parentheses reflects total number of FQHCs within a sector.

\*\*The three FQHCs listed reflect the three most distant FQHCs from a VA POC.

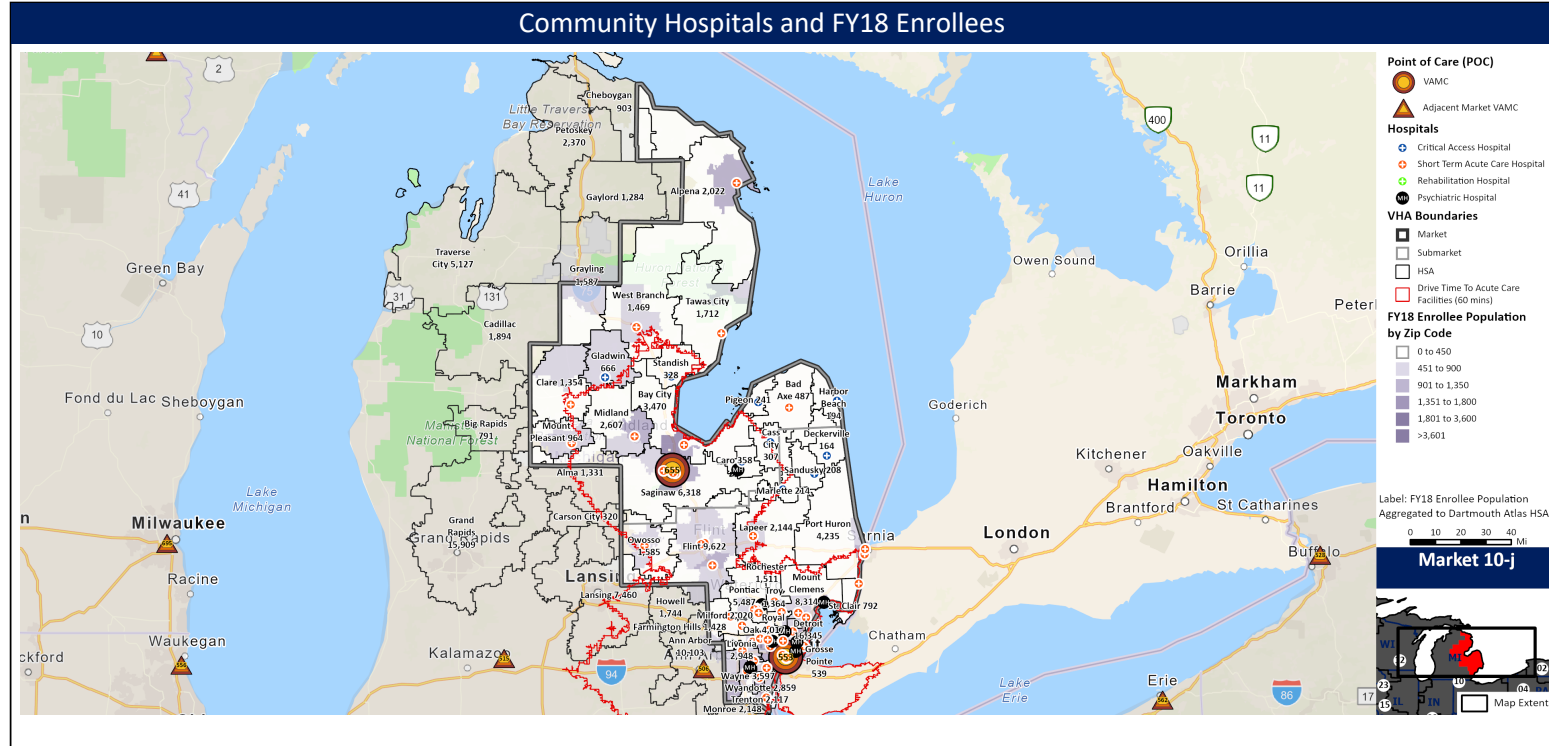
Source: 1. FQHC – HRSA Data Warehouse 2. IHS – ESRI Meta Data 3. DoD – Federal Practitioner - 2019 Directory

7.1.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market

## Supply ► Market Community Hospital Overview



Note: Map provides context of community hospital density as map scale prevents illustration of all hospitals.

A Dartmouth Atlas Hospital Service Area (HSA) is a ZIP code-defined geography encompassing the community where the ZIP code's Medicare residents predominantly receive their hospital care.

Source: 1. Definitive Healthcare 2. Geocoded Enrollee File FY18Q4

7.2.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Supply ► Market Community Hospital Overview, cont.

Community Hospital Overview			
VAMC Area	Hospitals*	Total Staffed Beds	Total Occupancy**
(553) Detroit	46	10,884	64.7%
(655) Saginaw	15	2,572	62.7%
Total Hospitals in the Market	66	13,314	63.2%

Note: The VAMC area is defined as the area within a 60 minute drive time of VAMC.

\*Includes short term acute, critical access, psychiatric, and rehabilitation hospitals with a CMS Cost Report in FY17 or FY18 (does not include pediatric or DOD hospitals) and can include multi-campus hospitals reporting under a single provider number.

\*\*Occupancy is based on total staffed beds.



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Community Hospital Current and Future Inpatient Demand &amp; Supply

Top Hospitals <sup>1,2</sup>	Med/Surg/Acute		Mental Health		Rehab		CMI
	Beds <sup>3</sup>	Occupancy <sup>4</sup>	Beds <sup>3</sup>	Occupancy <sup>4</sup>	Beds <sup>3</sup>	Occupancy <sup>4</sup>	
Beaumont Hospital - Royal Oak	998	75.7%	30	77.5%	61	81.3%	1.72
University Hospital, Von Voigtlander Womens Hospital	931	73.0%	43	83.7%	32	91.5%	2.39
Henry Ford Hospital	682	74.6%	N/A	N/A	N/A	N/A	2.15
Beaumont Hospital - Dearborn	632	67.5%	N/A	N/A	N/A	N/A	1.80
Ascension Providence Hospital - Southfield Campus, Novi Campus	582	59.6%	25	82.8%	16	45.8%	1.78
Ascension St John Hospital	546	62.3%	27	67.7%	36	42.2%	1.94
Beaumont Hospital - Troy	495	73.7%	N/A	N/A	25	81.1%	1.50
St Joseph Mercy Ann Arbor	444	70.6%	24	87.3%	30	72.8%	1.80
Ascension Macomb-Oakland Hospital - Warren Campus, Madison Heights Campus	427	64.9%	54	77.8%	24	59.0%	1.63
DMC Sinai-Grace Hospital	369	66.8%	21	70.7%	12	73.3%	1.55
St Joseph Mercy Oakland	369	60.3%	33	77.8%	30	46.5%	1.78
Ascension Genesys Hospital	350	67.9%	N/A	N/A	20	60.5%	1.87
DMC Harper University Hospital, DMC Hutzel Womens Hospital	346	69.8%	N/A	N/A	N/A	N/A	1.76
Henry Ford Macomb Hospital - Clinton Township, Mt Clemens	321	61.8%	72	66.9%	40	80.8%	1.73
Henry Ford Wyandotte Hospital	281	54.1%	38	70.1%	38	63.1%	1.56
Other Hospitals in Area (31)	2,747	57.9%	944	82.0%	243	63.0%	1.58
<b>Total</b>	<b>9,145</b>	<b>64.6%</b>	<b>1,244</b>	<b>79.9%</b>	<b>545</b>	<b>64.4%</b>	<b>1.65</b>

1. Top hospitals based on number of staffed beds. 2. All beds within acute psychiatric and rehab commercial hospitals were assumed to be psychiatric or rehab beds. 3. Indicates staffed beds 4. Occupancy rate = total Bed Days of Care (BDOC) divided by staffed operating beds. 5. Applied growth rate and assumes actual beds remains the same. 6. BDOC and Projection Rate from IBM Market Expert

\* Includes acute rehabilitation

Source: 1. CMS Cost Reports 2. IBM Market Expert

7.3.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Community Hospital Current and Future Inpatient Demand &amp; Supply, cont.

Future Supply and Demand													
	2018						Estimated 2028						
	ADC	BDOC	Actual Beds	2018 Actual Occupancy	75% Occupancy Bed Need	80% Occupancy Bed Need	Projection Rate	ADC	BDOC	Actual Beds	2028 Projected Occupancy	75% Occupancy Bed Need	80% Occupancy Bed Need
Medicine/Surgical*	7,450	2,719,303	11,497	64.8%	9,934	9,313	2.6%	7,438	2,714,702	11,497	64.7%	9,917	9,297
Medicine/Surgical* Conceptual Excess					1,563	2,184						1,580	2,200
Mental Health	1,312	478,980	1,599	82.1%	1,750	1,640	17.8%	1,546	564,186	1,599	96.7%	2,061	1,932
Mental Health Conceptual Excess					-151	-41						-462	-333

1. Top hospitals based on number of staffed beds. 2. All beds within acute psychiatric and rehab commercial hospitals were assumed to be psychiatric or rehab beds. 3. Indicates staffed beds 4. Occupancy rate = total Bed Days of Care (BDOC) divided by staffed operating beds. 5. Applied growth rate and assumes actual beds remains the same. 6. BDOC and Projection Rate from IBM Market Expert

\* Includes acute rehabilitation





## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Community Hospital Current and Future Inpatient Demand &amp; Supply

Top Hospitals <sup>1,2</sup>	Med/Surg/Acute		Mental Health		Rehab		CMI
	Beds <sup>3</sup>	Occupancy <sup>4</sup>	Beds <sup>3</sup>	Occupancy <sup>4</sup>	Beds <sup>3</sup>	Occupancy <sup>4</sup>	
Covenant Medical Center - Harrison, Cooper	455	80.8%	N/A	N/A	41	69.5%	1.71
Hurley Medical Center	370	66.1%	35	85.9%	13	53.6%	1.54
Ascension Genesys Hospital	350	67.9%	N/A	N/A	20	60.5%	1.87
MidMichigan Medical Center - Midland	324	46.0%	N/A	N/A	N/A	N/A	1.87
McLaren Flint	301	77.2%	34	69.3%	18	83.6%	1.91
McLaren Bay Region	297	58.2%	23	88.3%	20	58.3%	1.76
Ascension St Marys Hospital	188	68.4%	N/A	N/A	N/A	N/A	2.01
Caro Center	N/A	N/A	148	99.9%	N/A	N/A	N/A
Memorial Healthcare	107	32.1%	19	23.8%	N/A	N/A	1.36
MidMichigan Medical Center - Gratiot	49	57.0%	26	96.7%	18	52.3%	1.41
MidMichigan Medical Center - Clare	49	13.7%	N/A	N/A	N/A	N/A	1.28
Ascension Standish Hospital *	25	11.9%	N/A	N/A	N/A	N/A	N/A
Hills & Dales General Hospital*	25	10.7%	N/A	N/A	N/A	N/A	N/A
McLaren Caro Region *	25	2.5%	N/A	N/A	N/A	N/A	N/A
Healthsource Saginaw	7	58.8%	85	82.0%	38	17.4%	0.78
Other Hospitals in Area (0)		N/A		N/A		N/A	N/A
<b>Total</b>	<b>2,523</b>	<b>62.8%</b>	<b>344</b>	<b>86.1%</b>	<b>150</b>	<b>53.9%</b>	<b>1.61</b>

1. Top hospitals based on number of staffed beds. 2. All beds within acute psychiatric and rehab commercial hospitals were assumed to be psychiatric or rehab beds. 3. Indicates staffed beds 4. Occupancy rate = total Bed Days of Care (BDOC) divided by staffed operating beds. 5. Applied growth rate and assumes actual beds remains the same. 6. BDOC and Projection Rate from IBM Market Expert

\* Includes acute rehabilitation

Source: 1. CMS Cost Reports 2. IBM Market Expert

7.3.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Community Hospital Current and Future Inpatient Demand &amp; Supply, cont.

Future Supply and Demand													
	2018						Estimated 2028						
	ADC	BDOC	Actual Beds	2018 Actual Occupancy	75% Occupancy Bed Need	80% Occupancy Bed Need	Projection Rate	ADC	BDOC	Actual Beds	2028 Projected Occupancy	75% Occupancy Bed Need	80% Occupancy Bed Need
Medicine/Surgical*	1,702	621,361	2,740	62.1%	2,270	2,128	-4.0%	1,592	581,219	2,740	58.1%	2,123	1,990
Medicine/Surgical* Conceptual Excess					470	612						617	750
Mental Health	321	117,232	370	86.8%	428	401	12.0%	360	131,276	370	97.2%	480	450
Mental Health Conceptual Excess					-58	-31						-110	-80

1. Top hospitals based on number of staffed beds. 2. All beds within acute psychiatric and rehab commercial hospitals were assumed to be psychiatric or rehab beds. 3. Indicates staffed beds 4. Occupancy rate = total Bed Days of Care (BDOC) divided by staffed operating beds. 5. Applied growth rate and assumes actual beds remains the same. 6. BDOC and Projection Rate from IBM Market Expert

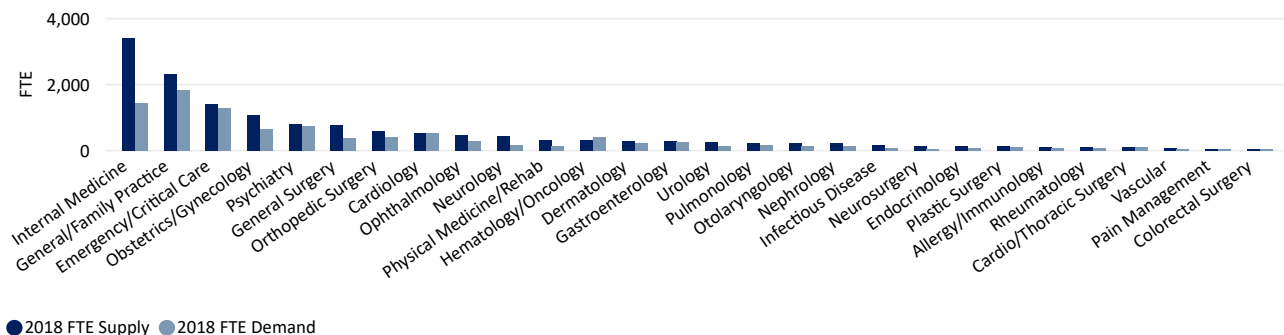
\* Includes acute rehabilitation



## VISN 10: Eastern Michigan Market — Detroit-Michigan

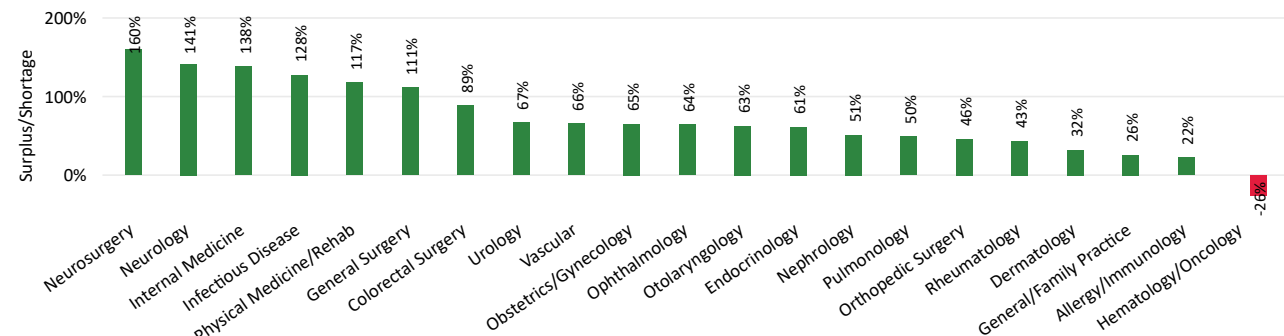
## Supply ► Community Physician Current Supply &amp; Demand

2018 FTE Supply and 2018 FTE Demand by Specialty\*



● 2018 FTE Supply ● 2018 FTE Demand

Provider Surplus/Shortage vs. 2018 FTE Demand\*



\*FTE net percentage of supply for specialties between -15% and 15% are not included given the FTE supply for those specialties are comparable to FTE demand

Note: FTE demand based on median productivity by specialty

Source: IBM Watson Market Expert

Specialty	2018 FTE Supply	2018 FTE Demand	Shortage/Surplus
<b>1. Primary Care</b>			
General/Family Practice	2,305	1,836	468
Internal Medicine	3,396	1,425	1,971
<b>2. Specialty Care (Medical)</b>			
Allergy/Immunology	108	88	20
Cardiology	539	519	20
Dermatology	293	222	71
Endocrinology	133	83	51
Gastroenterology	282	250	31
Hematology/Oncology	304	412	-108
Infectious Disease	154	68	86
Nephrology	222	147	75
Neurology	425	176	249
Pulmonology	237	159	79
Rheumatology	106	74	32
<b>3. Specialty Care (Surgical)</b>			
Cardio/Thoracic Surgery	95	93	3
Colorectal Surgery	37	20	17
General Surgery	774	366	408
Neurosurgery	147	56	90
Ophthalmology	468	285	183
Orthopedic Surgery	602	413	189
Otolaryngology	236	145	91
Plastic Surgery	126	118	7
Urology	244	146	98
Vascular	88	53	35
<b>4. Women's Health</b>			
Obstetrics/Gynecology	1,072	650	422
<b>5. Mental Health</b>			
Psychiatry	807	733	73
<b>6. Rehab</b>			
Physical Medicine/Rehab	321	147	173
<b>7. Emergency Services</b>			
Emergency/Critical Care	1,414	1,294	120
<b>8. Other Services</b>			
Pain Management	48	55	-7



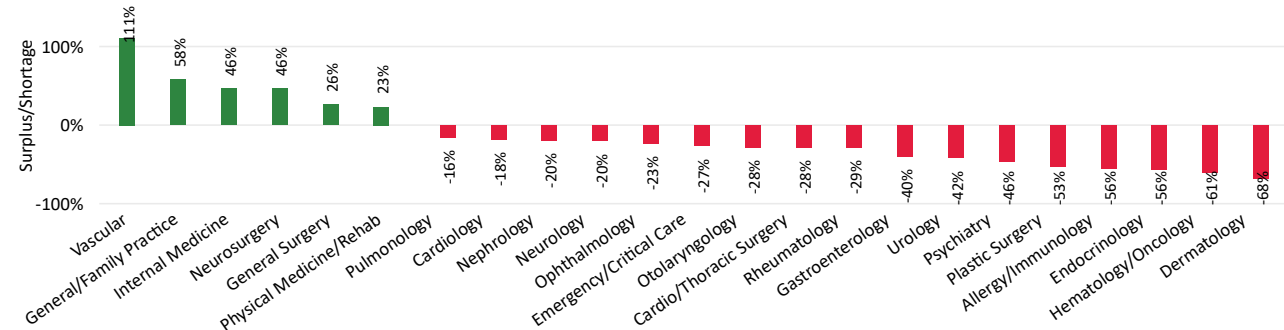
## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Community Physician Current Supply &amp; Demand

2018 FTE Supply and 2018 FTE Demand by Specialty\*



Provider Surplus/Shortage vs. 2018 FTE Demand\*



\*FTE net percentage of supply for specialties between -15% and 15% are not included given the FTE supply for those specialties are comparable to FTE demand

Note: FTE demand based on median productivity by specialty

Source: IBM Watson Market Expert

Specialty	2018 FTE Supply	2018 FTE Demand	Shortage/Surplus
<b>1. Primary Care</b>			
General/Family Practice	742	471	271
Internal Medicine	534	365	169
<b>2. Specialty Care (Medical)</b>			
Allergy/Immunology	10	22	-12
Cardiology	101	122	-22
Dermatology	18	56	-38
Endocrinology	9	21	-12
Gastroenterology	37	62	-25
Hematology/Oncology	39	101	-62
Infectious Disease	16	17	-1
Nephrology	28	34	-7
Neurology	36	45	-9
Pulmonology	33	39	-6
Rheumatology	14	19	-5
<b>3. Specialty Care (Surgical)</b>			
Cardio/Thoracic Surgery	17	23	-7
Colorectal Surgery	5	5	0
General Surgery	115	91	24
Neurosurgery	21	15	7
Ophthalmology	54	70	-16
Orthopedic Surgery	93	105	-12
Otolaryngology	27	37	-10
Plastic Surgery	14	30	-16
Urology	22	37	-16
Vascular	25	12	13
<b>4. Women's Health</b>			
Obstetrics/Gynecology	167	162	5
<b>5. Mental Health</b>			
Psychiatry	104	193	-90
<b>6. Rehab</b>			
Physical Medicine/Rehab	46	37	9
<b>7. Emergency Services</b>			
Emergency/Critical Care	257	351	-93
<b>8. Other Services</b>			
Pain Management	13	13	-1



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Supply ► Known Major Changes in Community Hospitals – Detroit-Michigan Area

## Community Hospitals in the Detroit-Michigan Area

**New Facilities/Capability/Residency**

- Beaumont Health will occupy a four-story medical office building in Livonia to house primary and specialty care physicians, provide emergency care, imaging, outpatient surgery, cancer treatment services, and physical therapy, among others. Expected completion is 2020. (Article Date: 04/2019)
- Beaumont Health plans to develop a new outpatient care campus in Lenox Township in 2020, offering primary, specialty and emergency care, imaging, outpatient surgery, and physical therapy. Construction will begin in late 2019 and complete in 2020. (Article Date: 03/2019)
- Beaumont Hospital, Farmington Hills is investing \$150 million to expand its emergency, trauma, surgical, and critical care centers. Construction will complete in 2020 and patient capacity will increase from 65,000 to 88,000 annually. (Article Date: 02/2019)
- Harley Ellis Devereaux completed the Robert H. and Judy Dow Alexander Cancer Center at the St. Joseph Mercy Ann Arbor's hospital campus. The expanded 66,000 square foot, \$24 million renovation was designed to accommodate growth and to enhance cancer research and treatment facilities. (Article Date: 01/2019)
- Detroit Medical Center plans to add 79 new Medicare-funded residency slots to its graduate medical education programs to help advance training in medical specialties. (Article Date: 01/2019)
- Beaumont Health partnered with Universal Health Services to build a new \$40 million 150-bed mental health hospital in Dearborn, Michigan. Construction began in early 2019 and the facility will be operated, managed, and majority owned by UHS. (Article Date: 11/2018)
- In September 2018, University of Michigan Kellogg Eye Center opened its most comprehensive community eye clinic at Michigan Medicine's Brighton Center for Specialty Care which offers minimally invasive, complex eye procedures and the latest laser technology for vision correction. (Article Date: 10/2018)
- Henry Ford Health System will occupy the entirety of the new Royal Oak City Center with a six-story, high-tech outpatient medical center, expected to open in mid-2020. Services will include primary care, outpatient surgery, women's health, sports medicine, pediatrics, rehabilitation, and radiology. (Article Date: 09/2018)

**Mergers/Acquisitions/Partnerships**

- Detroit Medical Center (DMC) and Meharry Medical College announced the expansion of their affiliation to provide additional medical education and training for Meharry students in Metro Detroit on April 4, 2019. The two-year agreement will increase the number of medical students across all DMC hospitals. (Article Date: 04/2019)
- Beaumont Health System and Alternate Solutions Health Network have partnered in a new home health and hospice joint venture designed to expand patient access to care. The new organization is called Beaumont Home Health and Hospice and began operations January 1, 2019. (Article Date: 01/2019)



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Supply ► Known Major Changes in Community Hospitals – Saginaw-Michigan Area

## Community Hospitals in the Saginaw-Michigan Area

**New Facilities/Capability/Residency**

- Karmanos plans to complete a \$47.5 million renovation for its Lawrence and Idell Weisberg Cancer Treatment Center in Farmington Hills, expanding the center from 17,700 to 69,100 square feet. The center is expected to be completed by 2021. (Article Date: 06/2019)
- McLaren Health Care and Michigan State University began construction on new \$450 million, 250-bed health care campus adjacent to the university in South Lansing. The campus will employ more than 1,000 personnel. Estimated completion is early 2022. (Article Date: 12/2018)

**Mergers/Acquisitions/Partnerships**

- Covenant HealthCare announced July 11, 2018, that it has partnered with Wound Care Advantage to provide full-service management and consulting as it expands its outpatient wound care and hyperbaric medicine program (Article Date: 07/2018)
- On October 17, 2018, Walgreens and McLaren Health Care announced a strategic collaboration focused on health service and pharmacy offerings. McLaren plans to open a combination of several different types of health service offerings in Walgreens retail locations throughout Michigan. (Article Date: 10/2018 – No update as of July 2019)
- Covenant HealthCare, Deckerville Community Hospital, Harbor Beach Community Hospital, Hills & Dales General Hospital, Marlette Regional Hospital and Scheurer Hospital have formed a new network to better coordinate their efforts. The new Covenant Regional Thumb Network partnership gives Covenant the right of first refusal if one of the smaller hospitals needs a buyer in order to stay open. (Article Date: 03/2019)



Access ► **Current Access**



## VISN 10: Eastern Michigan Market

## Access ► Same Day Appointments (FY15-18)

## Same Day Appointment Totals

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506GB) Flint	232	153	181	124	395	427	387	391	118	172	139	162
<b>Facility Total</b>	<b>232</b>	<b>153</b>	<b>181</b>	<b>124</b>	<b>395</b>	<b>427</b>	<b>387</b>	<b>391</b>	<b>118</b>	<b>172</b>	<b>139</b>	<b>162</b>
(V10) (553) Detroit-Michigan	4,820	6,445	6,155	6,277	2,979	4,850	3,104	6,936	7,947	8,597	11,732	12,049
(V10) (553GA) Yale	82	78	76	18	324	337	775	924	1	0	N/A	N/A
(V10) (553GB) Pontiac	20	22	13	10	1,443	1,314	1,107	1,307	208	225	223	194
(V10) (553QA) Piquette Street	N/A	N/A	6	N/A	N/A	N/A	111	103	N/A	N/A	N/A	N/A
<b>Facility Total</b>	<b>4,922</b>	<b>6,545</b>	<b>6,250</b>	<b>6,305</b>	<b>4,746</b>	<b>6,501</b>	<b>5,097</b>	<b>9,270</b>	<b>8,156</b>	<b>8,822</b>	<b>11,955</b>	<b>12,243</b>
(V10) (655) Saginaw-Michigan	938	977	579	682	5,079	3,705	5,074	4,583	17,194	20,075	19,300	20,687
(V10) (655GA) Gaylord - (V10) MichErie	99	80	76	78	1,013	950	1,034	920	36	37	33	24
(V10) (655GB) Traverse City - (V10) MichErie	70	43	38	130	888	952	993	766	65	43	49	29
(V10) (655GC) Oscoda	23	18	39	5	595	634	604	452	32	20	40	16
(V10) (655GD) Alpena	33	31	33	28	809	844	925	945	63	130	111	98
(V10) (655GE) Clare	81	81	88	95	609	608	523	577	93	240	300	334
(V10) (655GF) Bad Axe	33	47	30	62	318	477	583	596	117	132	130	164

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.1.V10.EasternMichigan





## VISN 10: Eastern Michigan Market

## Access ► Same Day Appointments (FY15-18), cont.

## Same Day Appointment Totals

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (655GG) Cadillac - (V10) MichErie	47	66	54	77	641	676	633	490	1,042	1,281	1,765	1,786
(V10) (655GH) Cheboygan County - (V10) MichErie	22	35	53	35	404	532	554	451	14	30	26	11
(V10) (655GI) Grayling - (V10) MichErie	26	36	35	63	529	495	464	417	22	24	15	5
(V10) (655QA) Saginaw-Barnard Road	N/A	N/A	329	511	N/A	N/A	N/A	N/A	N/A	N/A	145	180
(V10) (655QB) Grand Traverse - (V10) MichErie	N/A	47	156	311	N/A	N/A	N/A	N/A	N/A	8	40	40
Facility Total	1,372	1,461	1,510	2,077	10,885	9,873	11,387	10,197	18,678	22,020	21,954	23,374
Market Total	6,526	8,159	7,941	8,506	16,026	16,801	16,871	19,858	26,952	31,014	34,048	35,779

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.1.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market

## Access ► Established Patient Appointments (FY15-18)

Average Established Patient Wait (Days) from Preferred Date (PD)

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(3V10) (506GB) Flint, MI	3.2	3.2	3.0	3.8	4.5	5.7	5.2	3.0	1.0	1.1	1.7	0.8
(3V10) (553) Detroit, MI (John D. Dingell)	1.4	1.7	1.7	2.1	3.2	5.3	6.4	4.2	2.1	6.2	5.2	4.3
(3V10) (553GA) Yale, MI	0.3	0.1	0.1	0.3	0.6	1.3	2.3	1.2	0.0	0.0	N/A	N/A
(3V10) (553GB) Pontiac, MI	2.1	2.6	4.3	4.3	3.1	3.1	4.4	3.6	1.3	3.7	3.9	5.3
(3V10) (553QA) Piquette Street, MI	N/A	N/A	0.0	N/A	N/A	N/A	0.0	1.1	N/A	N/A	N/A	N/A
(3V10) (655) Saginaw, MI (Aleda E. Lutz)	1.8	2.1	1.6	0.5	0.9	2.1	2.4	3.6	3.2	5.5	5.3	6.0
(3V10) (655GA) Gaylord, MI	0.6	0.5	0.7	1.9	0.8	0.8	1.9	2.5	0.7	3.1	2.3	2.1
(3V10) (655GB) Traverse City, MI (Colonel Demas T....	1.1	2.1	0.7	1.4	0.9	2.4	2.3	3.4	1.5	3.7	1.7	5.5
(3V10) (655GC) Oscoda, MI	0.7	1.2	1.8	3.3	0.2	2.3	1.9	2.6	4.1	2.9	3.9	2.5
(3V10) (655GD) Alpena, MI (Lieutenant Colonel Cle...	1.3	1.6	3.7	4.1	1.0	0.8	1.7	3.5	0.8	1.5	1.9	3.7
(3V10) (655GE) Clare, MI	1.9	2.9	3.5	4.5	0.6	2.2	2.4	2.4	1.9	2.2	1.9	1.9
(3V10) (655GF) Bad Axe, MI	1.5	1.2	1.2	2.7	2.7	1.5	3.1	2.3	0.5	0.3	1.2	2.0
(3V10) (655GG) Cadillac, MI	0.7	1.6	1.9	2.2	0.5	1.3	2.3	2.7	2.5	3.5	2.7	2.0
(3V10) (655GH) Cheboygan County, MI	1.4	0.6	1.0	1.9	0.9	0.7	1.4	3.5	1.1	0.6	2.2	5.6
(3V10) (655GI) Grayling, MI	3.2	4.8	3.3	4.1	1.7	3.0	3.8	4.5	4.0	3.1	2.5	2.4

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.2.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

**Access** ► **Established Patient Appointments (FY15-18), cont.**

Average Established Patient Wait (Days) from Preferred Date (PD)

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(3V10) (655QA) Saginaw-Barnard Road, MI	N/A	N/A	2.0	2.7	N/A	N/A	N/A	N/A	N/A	N/A	0.4	0.3
(3V10) (655QB) Grand Traverse, MI	N/A	2.9	2.7	2.7	N/A	N/A	N/A	N/A	N/A	1.8	2.7	4.6
National Average	2.9	2.7	2.6	3.3	4.0	4.4	4.1	4.3	4.5	5.3	5.4	6.3

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.2.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market

## Access ► Established Patient Appointments (FY15-18), cont.

Established Patient Percent of Appointments Completed within 30 Days of Clinically Indicated/Patient Preference

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506GB) Flint	98.2%	98.2%	98.7%	96.1%	97.7%	95.4%	95.2%	99.5%	99.4%	99.5%	99.5%	99.8%
(V10) (553) Detroit-Michigan	99.3%	99.0%	98.9%	98.5%	97.3%	96.8%	94.3%	97.2%	97.9%	93.6%	96.1%	96.7%
(V10) (553GA) Yale	99.7%	100.0%	100.0%	99.9%	100.0%	99.9%	99.5%	99.7%	100.0%	100.0%	N/A	N/A
(V10) (553GB) Pontiac	99.6%	99.9%	98.7%	97.3%	97.4%	99.4%	98.2%	99.0%	99.9%	99.1%	99.1%	97.7%
(V10) (553QA) Piquette Street	N/A	N/A	100.0%	N/A	N/A	N/A	100.0%	99.6%	N/A	N/A	N/A	N/A
(V10) (655) Saginaw-Michigan	99.6%	99.9%	99.9%	99.9%	99.8%	99.7%	99.2%	98.5%	97.1%	94.1%	94.8%	94.2%
(V10) (655GA) Gaylord - (V10) MichErie	99.9%	100.0%	99.9%	99.2%	99.9%	100.0%	99.4%	98.8%	99.7%	96.9%	98.1%	99.4%
(V10) (655GB) Traverse City - (V10) MichErie	100.0%	100.0%	100.0%	99.5%	99.9%	100.0%	99.6%	99.1%	99.6%	97.9%	98.7%	94.9%
(V10) (655GC) Oscoda	99.5%	99.8%	100.0%	99.3%	100.0%	100.0%	100.0%	99.8%	95.9%	98.0%	97.2%	99.1%
(V10) (655GD) Alpena	99.6%	100.0%	99.4%	98.2%	99.7%	100.0%	99.9%	99.0%	100.0%	99.3%	99.5%	97.4%
(V10) (655GE) Clare	99.9%	100.0%	99.6%	96.8%	99.9%	100.0%	99.9%	99.6%	99.8%	100.0%	99.5%	99.4%
(V10) (655GF) Bad Axe	100.0%	100.0%	99.9%	98.6%	99.1%	99.7%	97.8%	98.8%	100.0%	99.9%	99.3%	99.4%
(V10) (655GG) Cadillac - (V10) MichErie	100.0%	100.0%	99.7%	99.6%	99.9%	100.0%	99.8%	99.4%	96.9%	96.8%	98.7%	99.7%
(V10) (655GH) Cheboygan County - (V10) MichErie	99.7%	100.0%	99.7%	99.1%	99.9%	100.0%	99.7%	99.5%	100.0%	100.0%	99.2%	93.0%
(V10) (655GI) Grayling - (V10) MichErie	98.4%	98.6%	99.3%	98.2%	99.9%	100.0%	98.9%	98.5%	97.3%	98.7%	99.7%	98.9%

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.3.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Access ► Established Patient Appointments (FY15-18), cont.

Established Patient Percent of Appointments Completed within 30 Days of Clinically Indicated/Patient Preference

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (655QA) Saginaw-Barnard Road	N/A	N/A	99.8%	98.8%	N/A	N/A	N/A	N/A	N/A	N/A	100.0%	99.7%
(V10) (655QB) Grand Traverse - (V10) MichErie	N/A	100.0%	99.5%	99.1%	N/A	N/A	N/A	N/A	N/A	100.0%	97.5%	97.8%
National Average	97.7%	98.2%	98.5%	97.6%	96.8%	96.8%	97.4%	97.2%	96.1%	95.3%	95.5%	94.5%

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.3.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market

Access ► **New Patient Appointments (FY15-18)**

Average New Patient Average Wait (Days) from Create Date (CD)

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(3V10) (506GB) Flint, MI	14.3	13.9	17.2	19.8	30.3	29.3	29.1	18.6	23.1	11.3	9.5	10.0
(3V10) (553) Detroit, MI (John D. Dingell)	11.6	12.1	9.3	8.7	9.4	8.4	14.5	13.1	27.7	23.5	18.9	19.3
(3V10) (553GA) Yale, MI	24.0	0.0	2.0	N/A	21.7	20.3	19.5	26.3	N/A	N/A	N/A	N/A
(3V10) (553GB) Pontiac, MI	20.5	16.9	19.4	23.0	25.9	8.6	15.6	13.2	11.7	18.6	18.7	19.6
(3V10) (553QA) Piquette Street, MI	N/A	N/A	N/A	N/A	N/A	N/A	4.0	5.0	N/A	N/A	N/A	N/A
(3V10) (655) Saginaw, MI (Aleda E. Lutz)	12.0	11.6	6.2	1.5	13.0	16.9	20.0	19.6	22.1	25.9	24.9	20.0
(3V10) (655GA) Gaylord, MI	7.2	6.8	11.3	10.6	13.2	10.9	9.9	11.6	10.5	14.5	16.7	14.4
(3V10) (655GB) Traverse City, MI (Colonel Demas T. Craw)	8.8	11.1	8.8	3.5	12.6	12.1	12.1	15.1	18.9	15.8	18.0	10.3
(3V10) (655GC) Oscoda, MI	13.5	11.4	10.6	12.4	13.2	14.9	16.0	16.4	20.9	15.0	17.6	13.0
(3V10) (655GD) Alpena, MI (Lieutenant Colonel Clement C. Van Wagoner)	11.0	10.1	17.7	16.9	16.1	9.4	10.3	8.9	10.8	12.8	15.1	14.5
(3V10) (655GE) Clare, MI	6.8	5.9	15.3	21.7	12.5	15.7	17.7	19.7	12.5	11.9	11.9	13.3
(3V10) (655GF) Bad Axe, MI	9.6	9.4	7.7	11.3	15.0	14.1	15.4	24.9	8.8	7.0	10.9	8.9
(3V10) (655GG) Cadillac, MI	9.8	10.0	9.2	12.8	19.1	20.4	18.8	28.0	16.5	18.3	18.4	18.6
(3V10) (655GH) Cheboygan County, MI	20.7	10.6	9.8	12.4	12.4	9.9	10.1	11.7	12.6	9.7	12.2	23.0
(3V10) (655GI) Grayling, MI	13.0	17.9	12.1	12.5	11.5	15.7	16.6	23.6	27.8	12.8	17.2	16.2

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.4.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Access ► New Patient Appointments (FY15-18), cont.

Average New Patient Average Wait (Days) from Create Date (CD)

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(3V10) (655QA) Saginaw-Barnard Road, MI	N/A	N/A	11.4	13.0	N/A	N/A	N/A	N/A	N/A	N/A	0.9	2.6
(3V10) (655QB) Grand Traverse, MI	N/A	10.2	15.1	13.0	N/A	N/A	N/A	N/A	N/A	16.9	20.3	12.9
National Average	12.4	12.0	11.3	11.3	21.2	22.7	22.6	21.2	21.5	21.2	21.0	22.5

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.4.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market

## Access ► New Patient Appointments (FY15-18), cont.

Percent of New Patient Appointments Completed within 30 Days

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506GB) Flint	89.1%	96.4%	87.2%	85.2%	53.8%	50.1%	54.6%	90.9%	69.0%	86.8%	88.0%	87.2%
(V10) (553) Detroit-Michigan	92.7%	91.1%	96.0%	95.0%	94.9%	95.5%	94.5%	95.8%	66.2%	72.0%	80.4%	79.4%
(V10) (553GA) Yale	33.3%	100.0%	100.0%	N/A	82.0%	83.1%	82.3%	67.3%	N/A	N/A	N/A	N/A
(V10) (553GB) Pontiac	83.1%	87.8%	81.9%	83.3%	60.7%	97.6%	87.8%	95.5%	96.5%	83.3%	79.7%	74.6%
(V10) (553QA) Piquette Street	N/A	N/A	N/A	N/A	N/A	N/A	100.0%	100.0%	N/A	N/A	N/A	N/A
(V10) (655) Saginaw-Michigan	94.1%	98.8%	98.5%	99.8%	97.1%	93.9%	76.4%	85.5%	68.8%	65.4%	64.7%	74.8%
(V10) (655GA) Gaylord - (V10) MichErie	100.0%	100.0%	92.5%	95.7%	94.7%	98.5%	97.5%	97.7%	94.2%	84.0%	84.0%	89.3%
(V10) (655GB) Traverse City - (V10) MichErie	96.0%	94.7%	94.1%	99.3%	96.2%	96.9%	97.1%	93.2%	83.9%	86.8%	81.6%	93.3%
(V10) (655GC) Oscoda	92.9%	94.7%	96.4%	100.0%	98.2%	91.5%	90.4%	92.4%	80.7%	84.8%	87.4%	92.4%
(V10) (655GD) Alpena	100.0%	97.0%	88.3%	89.5%	87.9%	99.0%	97.5%	97.3%	96.9%	94.9%	91.3%	89.3%
(V10) (655GE) Clare	98.1%	99.0%	91.0%	71.8%	98.9%	96.9%	93.6%	81.6%	96.4%	94.8%	91.7%	91.4%
(V10) (655GF) Bad Axe	97.6%	98.1%	97.7%	90.7%	91.3%	92.7%	88.1%	57.5%	96.2%	98.4%	92.6%	98.3%
(V10) (655GG) Cadillac - (V10) MichErie	97.4%	96.8%	96.9%	91.8%	86.6%	86.7%	83.8%	59.4%	80.2%	85.6%	82.7%	81.0%
(V10) (655GH) Cheboygan County - (V10) MichErie	63.5%	98.3%	98.5%	92.2%	95.3%	97.9%	98.0%	97.2%	94.2%	91.8%	90.7%	72.7%
(V10) (655GI) Grayling - (V10) MichErie	94.4%	81.7%	92.2%	93.0%	98.6%	98.8%	90.2%	66.9%	67.7%	90.8%	87.2%	86.8%

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.5.V10.EasternMichigan





## VISN 10: Eastern Michigan Market

## Access ► New Patient Appointments (FY15-18), cont.

Percent of New Patient Appointments Completed within 30 Days

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (655QA) Saginaw-Barnard Road	N/A	N/A	99.7%	97.5%	N/A	N/A	N/A	N/A	N/A	N/A	100.0%	100.0%
(V10) (655QB) Grand Traverse - (V10) MichErie	N/A	94.4%	90.0%	92.5%	N/A	N/A	N/A	N/A	N/A	95.4%	77.1%	96.9%
National Average	90.1%	90.8%	91.2%	N/A	76.4%	73.2%	73.8%	N/A	75.2%	76.2%	76.3%	N/A

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.5.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Access ► Average Wait Time for Top 10 Consults – Detroit-Michigan

Receiving Service Stop Code (Top 10 by FY18 Consults)	Receiving Facility	FY18 Consults	Average Days to Completed Consult
(321) GI ENDOSCOPY	(V10) (553) Detroit-Michigan	4,928	46.0
(303) CARDIOLOGY	(V10) (553) Detroit-Michigan	10,545	33.0
(349) SLEEP MEDICINE	(V10) (553) Detroit-Michigan	8,310	31.5
(409) ORTHOPEDICS/JOINT SURGERY	(V10) (553) Detroit-Michigan	6,017	29.7
(502) MH CLINIC IND	(V10) (553) Detroit-Michigan	4,362	24.5
(205) PHYSICAL THERAPY	(V10) (553) Detroit-Michigan	9,123	20.0
(304) DERMATOLOGY	(V10) (553) Detroit-Michigan	7,229	19.0
(206) OCCUPATIONAL THERAPY	(V10) (553) Detroit-Michigan	4,567	9.0
(125) SOCIAL WORK SERVICE	(V10) (553) Detroit-Michigan	5,671	6.8
(418) AMPUTATION CLINIC	(V10) (553) Detroit-Michigan	23,576	4.8



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Access ► Average Wait Time for Top 10 Consults – Saginaw-Michigan

Receiving Service Stop Code (Top 10 by FY18 Consults)	Receiving Facility	FY18 Consults	Average Days to Completed Consult
(401) GENERAL SURGERY	(V10) (655) Saginaw-Michigan	2,087	39.9
(303) CARDIOLOGY	(V10) (655) Saginaw-Michigan	3,791	35.4
(116) RESPIRATORY THERAPY	(V10) (655) Saginaw-Michigan	2,303	35.3
(502) MH CLINIC IND	(V10) (655) Saginaw-Michigan	2,902	16.7
(205) PHYSICAL THERAPY	(V10) (655) Saginaw-Michigan	11,343	13.4
(160) CLINICAL PHARMACY	(V10) (655) Saginaw-Michigan	3,915	6.9
(718) DIABETIC RETINAL SCREENING	(V10) (655) Saginaw-Michigan	2,505	5.2
(304) DERMATOLOGY	(V10) (655) Saginaw-Michigan	1,815	4.7
(180) DENTAL	(V10) (655) Saginaw-Michigan	2,572	2.3
(408) OPTOMETRY	(V10) (655) Saginaw-Michigan	8,786	1.3



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Access ► Longest Wait Time – Top 10 Consults

Receiving Service Stop Code	Receiving Facility	FY18 Consults	Average Days to Completed Consult (Top 10 Stop Codes)
(339) OBSTETRICS	(V10) (553) Detroit-Michigan	2	194.5
(340) GENOMIC CARE	(V10) (553) Detroit-Michigan	66	180.5
(105) X-RAY	(V10) (553) Detroit-Michigan	57	166.1
(109) NUCLEAR MEDICINE	(V10) (553) Detroit-Michigan	17	156.0
(406) NEUROSURGERY	(V10) (553) Detroit-Michigan	286	152.2
(509) PSYCHIATRY	(V10) (553) Detroit-Michigan	102	146.4
(436) CHIROPRACTIC CARE	(V10) (553) Detroit-Michigan	1,264	140.2
(308) HEMATOLOGY	(V10) (553) Detroit-Michigan	628	140.0
(533) MH INTERVENTION BIOMED IND	(V10) (553) Detroit-Michigan	168	136.4
(703) MAMMOGRAM	(V10) (553) Detroit-Michigan	1,334	125.5



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Access ► Longest Wait Time – Top 10 Consults

Receiving Service Stop Code	Receiving Facility	FY18 Consults	Average Days to Completed Consult (Top 10 Stop Codes)
(321) GI ENDOSCOPY	(V10) (655) Saginaw-Michigan	333	142.6
(430) CYSTO ROOM UNIT FOR OUTPATIENT	(V10) (655) Saginaw-Michigan	186	98.4
(109) NUCLEAR MEDICINE	(V10) (655) Saginaw-Michigan	654	95.8
(414) UROLOGY	(V10) (655) Saginaw-Michigan	1,248	93.1
(349) SLEEP MEDICINE	(V10) (655) Saginaw-Michigan	1,090	66.8
(305) ENDOCRINOLOGY	(V10) (655) Saginaw-Michigan	191	65.1
(538) PSYCH TESTING	(V10) (655) Saginaw-Michigan	408	56.4
(104) PULMONARY FUNCTION	(V10) (655) Saginaw-Michigan	1,731	48.7
(201) PM&RS PHYSICIAN	(V10) (655) Saginaw-Michigan	153	48.4
(212) EMG - ELECTROMYOGRAM	(V10) (655) Saginaw-Michigan	261	47.4



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Access ► Estimated Capacity for Outpatient Workload

Primary Care PACT Teams											
VA Facility	FY18 Total Uniques	FY18 Total Encounters	FY18 Actual Primary Care (PC) Encounters		Count of Primary Care PACT Teams	Number of Teams at or over Capacity	Number of Teams at or under Capacity	Team PCP Capacity Total	Capacity Left	Panel Fullness	3rd Next Available Appt.
			Primary Care Encounters	Uniques							
(V10) (553) Detroit-Michigan	48,607	728,786	70,320	23,634	23	22	1	18,926	-3,437	118.0%	7.4
(V10) (553BU) Detroit Domiciliary	197	3,572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(V10) (553GA) Yale	4,443	17,610	9,708	4,320	1	1	0	944	-150	116.0%	5.2
(V10) (553GB) Pontiac	3,938	16,507	6,656	3,405	2	1	1	2,038	-156	108.0%	2.6
(V10) (553QA) Piquette Street	1,266	7,912	689	207	N/A	N/A	N/A	N/A	N/A	N/A	4.1



VISN 10: Eastern Michigan Market — Detroit-Michigan

Access ► Estimated Capacity for Outpatient Workload, cont.

Other Teams								
VA Facility	Tele Primary Care	HBPC	Women's Health	Geriatrics	Speciality	Academic	Other*	Total
(V10) (553) Detroit-Michigan	N/A	N/A	4	N/A	4	N/A	2	10
(V10) (553GA) Yale	N/A	N/A	4	N/A	N/A	N/A	N/A	4
(V10) (553GB) Pontiac	N/A	N/A	2	N/A	N/A	N/A	N/A	2

Source: 1.VSSC Encounters Cube 2. VSSC PACT Compass Cube



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Access ► Estimated Capacity for Outpatient Workload

Primary Care PACT Teams											
VA Facility	FY18 Total Uniques	FY18 Total Encounters	FY18 Actual Primary Care (PC) Encounters		Count of Primary Care PACT Teams	Number of Teams at or over Capacity	Number of Teams at or under Capacity	Team PCP Capacity Total	Capacity Left	Panel Fullness	3rd Next Available Appt.
			Primary Care Encounters	Uniques							
(V10) (655) Saginaw-Michigan	33,808	363,272	32,676	12,785	2	1	1	1,904	157	92.0%	14.4
(V10) (655GA) Gaylord - (V10) MichErie	3,712	20,556	5,698	2,766	N/A	N/A	N/A	N/A	N/A	N/A	5.3
(V10) (655GB) Traverse City - (V10) MichErie	4,099	12,675	6,609	3,668	N/A	N/A	N/A	N/A	N/A	N/A	3.6
(V10) (655GC) Oscoda	1,767	9,223	3,161	1,575	N/A	N/A	N/A	N/A	N/A	N/A	4.4
(V10) (655GD) Alpena	3,079	17,020	4,394	1,631	N/A	N/A	N/A	N/A	N/A	N/A	5.7
(V10) (655GE) Clare	4,274	23,887	6,597	3,194	1	0	1	1,087	237	78.0%	5.9
(V10) (655GF) Bad Axe	1,867	10,009	3,629	1,255	N/A	N/A	N/A	N/A	N/A	N/A	9.1
(V10) (655GG) Cadillac - (V10) MichErie	3,657	18,410	4,086	1,967	N/A	N/A	N/A	N/A	N/A	N/A	19.6
(V10) (655GH) Cheboygan County - (V10) MichErie	1,833	9,051	3,116	1,110	N/A	N/A	N/A	N/A	N/A	N/A	6.4
(V10) (655GI) Grayling - (V10) MichErie	1,568	7,584	2,658	1,214	N/A	N/A	N/A	N/A	N/A	N/A	9.9
(V10) (655QA) Saginaw-Barnard Road	5,094	41,601	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(V10) (655QB) Grand Traverse - (V10) MichErie	3,070	13,332	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A





## VISN 10: Eastern Michigan Market — Saginaw-Michigan

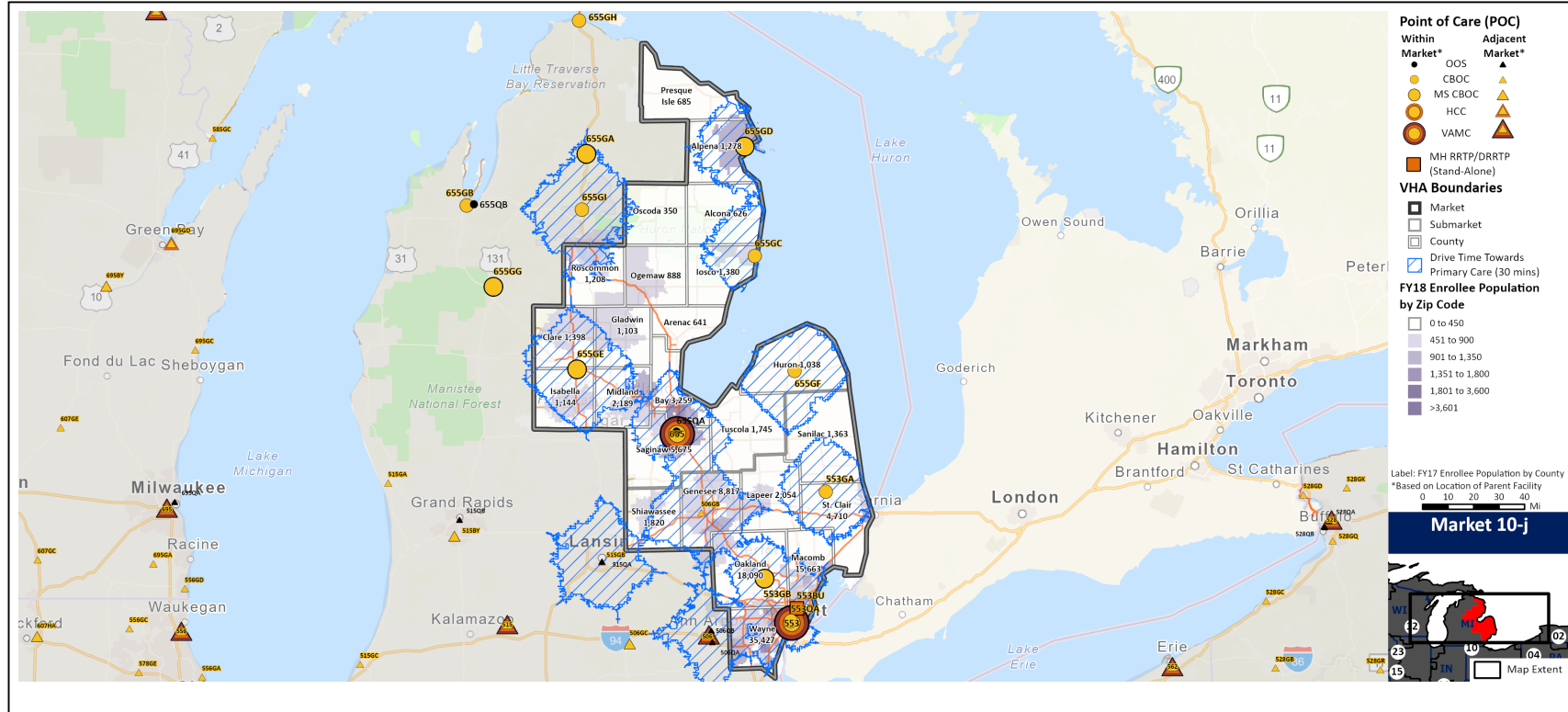
## Access ► Estimated Capacity for Outpatient Workload, cont.

Other Teams								
VA Facility	Tele Primary Care	HBPC	Women's Health	Geriatrics	Speciality	Academic	Other*	Total
(V10) (655) Saginaw-Michigan	N/A	N/A	13	N/A	N/A	N/A	N/A	13
(V10) (655GA) Gaylord - (V10) MichErie	N/A	N/A	3	N/A	N/A	N/A	N/A	3
(V10) (655GB) Traverse City - (V10) MichErie	N/A	N/A	4	N/A	N/A	N/A	N/A	4
(V10) (655GC) Oscoda	N/A	1	2	N/A	N/A	N/A	N/A	3
(V10) (655GD) Alpena	N/A	1	2	N/A	N/A	N/A	N/A	3
(V10) (655GE) Clare	N/A	N/A	3	N/A	N/A	N/A	N/A	3
(V10) (655GF) Bad Axe	N/A	N/A	2	N/A	N/A	N/A	N/A	2
(V10) (655GG) Cadillac - (V10) MichErie	N/A	N/A	3	N/A	N/A	N/A	N/A	3
(V10) (655GH) Cheboygan County - (V10) MichErie	N/A	N/A	2	N/A	N/A	N/A	N/A	2
(V10) (655GI) Grayling - (V10) MichErie	N/A	N/A	2	N/A	N/A	N/A	N/A	2



## VISN 10: Eastern Michigan Market

## Access ► Estimated 30 Minute Drive Time Zones



Source: Geocoded Enrollee File FY18Q4

8.9.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Access ► Clinic Utilization — Percent Slots Used of Total Slots

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506GB) Flint	82.0%	81.0%	83.0%	85.0%	67.0%	65.0%	68.0%	69.0%	74.0%	69.0%	83.0%	88.0%
(V10) (553) Detroit-Michigan	76.0%	77.0%	82.0%	77.0%	57.0%	67.0%	70.0%	73.0%	80.0%	79.0%	75.0%	74.0%
(V10) (553GA) Yale	65.0%	59.0%	57.0%	62.0%	77.0%	62.0%	69.0%	74.0%	21.0%	11.0%	-	-
(V10) (553GB) Pontiac	79.0%	80.0%	82.0%	84.0%	87.0%	67.0%	54.0%	47.0%	69.0%	68.0%	79.0%	78.0%
(V10) (553QA) Piquette Street	-	-	56.0%	-	-	-	26.0%	28.0%	-	-	-	-
(V10) (655) Saginaw-Michigan	56.0%	57.0%	50.0%	13.0%	55.0%	57.0%	49.0%	48.0%	68.0%	67.0%	66.0%	66.0%
(V10) (655GA) Gaylord - (V10) MichErie	59.0%	61.0%	62.0%	63.0%	64.0%	56.0%	51.0%	51.0%	38.0%	40.0%	34.0%	28.0%
(V10) (655GB) Traverse City - (V10) MichErie	70.0%	67.0%	45.0%	46.0%	64.0%	63.0%	48.0%	52.0%	82.0%	78.0%	30.0%	39.0%
(V10) (655GC) Oscoda	80.0%	68.0%	81.0%	78.0%	56.0%	55.0%	47.0%	47.0%	68.0%	75.0%	64.0%	43.0%
(V10) (655GD) Alpena	79.0%	78.0%	81.0%	79.0%	59.0%	60.0%	51.0%	54.0%	64.0%	59.0%	63.0%	71.0%
(V10) (655GE) Clare	47.0%	67.0%	80.0%	85.0%	56.0%	65.0%	57.0%	63.0%	79.0%	65.0%	30.0%	62.0%
(V10) (655GF) Bad Axe	81.0%	72.0%	66.0%	73.0%	68.0%	81.0%	52.0%	71.0%	72.0%	67.0%	68.0%	66.0%
(V10) (655GG) Cadillac - (V10) MichErie	69.0%	64.0%	64.0%	75.0%	63.0%	65.0%	57.0%	74.0%	47.0%	60.0%	68.0%	74.0%
(V10) (655GH) Cheboygan County - (V10) MichErie	80.0%	71.0%	68.0%	66.0%	48.0%	60.0%	48.0%	59.0%	38.0%	37.0%	36.0%	41.0%
(V10) (655GI) Grayling - (V10) MichErie	82.0%	78.0%	70.0%	71.0%	42.0%	67.0%	52.0%	64.0%	54.0%	62.0%	51.0%	49.0%
(V10) (655QA) Saginaw-Barnard Road	-	-	69.0%	66.0%	-	-	-	-	-	-	22.0%	23.0%
(V10) (655QB) Grand Traverse - (V10) MichErie	-	66.0%	74.0%	71.0%	-	-	-	-	-	82.0%	80.0%	81.0%

Source: VSSC Clinic Utilization Cube

8.10.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Access ► Cancelled by Clinic Report

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506GB) Flint	667	601	1,057	725	556	545	846	771	80	64	106	43
(V10) (553) Detroit-Michigan	5,338	4,220	4,376	3,143	5,879	5,066	6,281	3,740	14,405	13,769	13,960	10,796
(V10) (553GA) Yale	117	120	82	58	934	762	1,111	484	2	N/A	N/A	N/A
(V10) (553GB) Pontiac	204	117	172	116	515	733	693	343	469	380	298	286
(V10) (553QA) Piquette Street	N/A	N/A	N/A	N/A	N/A	8	77	82	N/A	N/A	N/A	N/A
(V10) (655) Saginaw-Michigan	2,608	2,270	525	147	3,340	2,479	4,262	3,257	8,768	7,627	10,123	6,993
(V10) (655GA) Gaylord - (V10) MichErie	369	318	351	306	387	306	420	396	60	88	170	134
(V10) (655GB) Traverse City - (V10) MichErie	558	214	43	35	620	422	472	409	492	288	62	61
(V10) (655GC) Oscoda	145	179	167	95	268	190	256	206	153	105	192	66
(V10) (655GD) Alpena	195	172	143	98	568	500	364	363	450	339	525	329
(V10) (655GE) Clare	463	359	475	445	718	714	612	549	611	549	371	386
(V10) (655GF) Bad Axe	102	112	102	98	167	212	318	274	212	238	241	202
(V10) (655GG) Cadillac - (V10) MichErie	343	424	529	239	361	519	514	417	166	458	586	372
(V10) (655GH) Cheboygan County - (V10) MichErie	207	165	198	157	194	176	415	281	36	39	59	60
(V10) (655GI) Grayling - (V10) MichErie	192	273	316	307	227	300	319	269	84	93	123	122
(V10) (655QA) Saginaw-Barnard Road	N/A	N/A	2,293	1,695	N/A	N/A	N/A	N/A	N/A	N/A	18	50
(V10) (655QB) Grand Traverse - (V10) MichErie	N/A	228	266	299	N/A	N/A	N/A	N/A	N/A	206	361	285
Total	11,508	9,772	11,095	7,963	14,734	12,932	16,960	11,841	25,988	24,243	27,195	20,185

Note: Appointments cancelled within 45 days

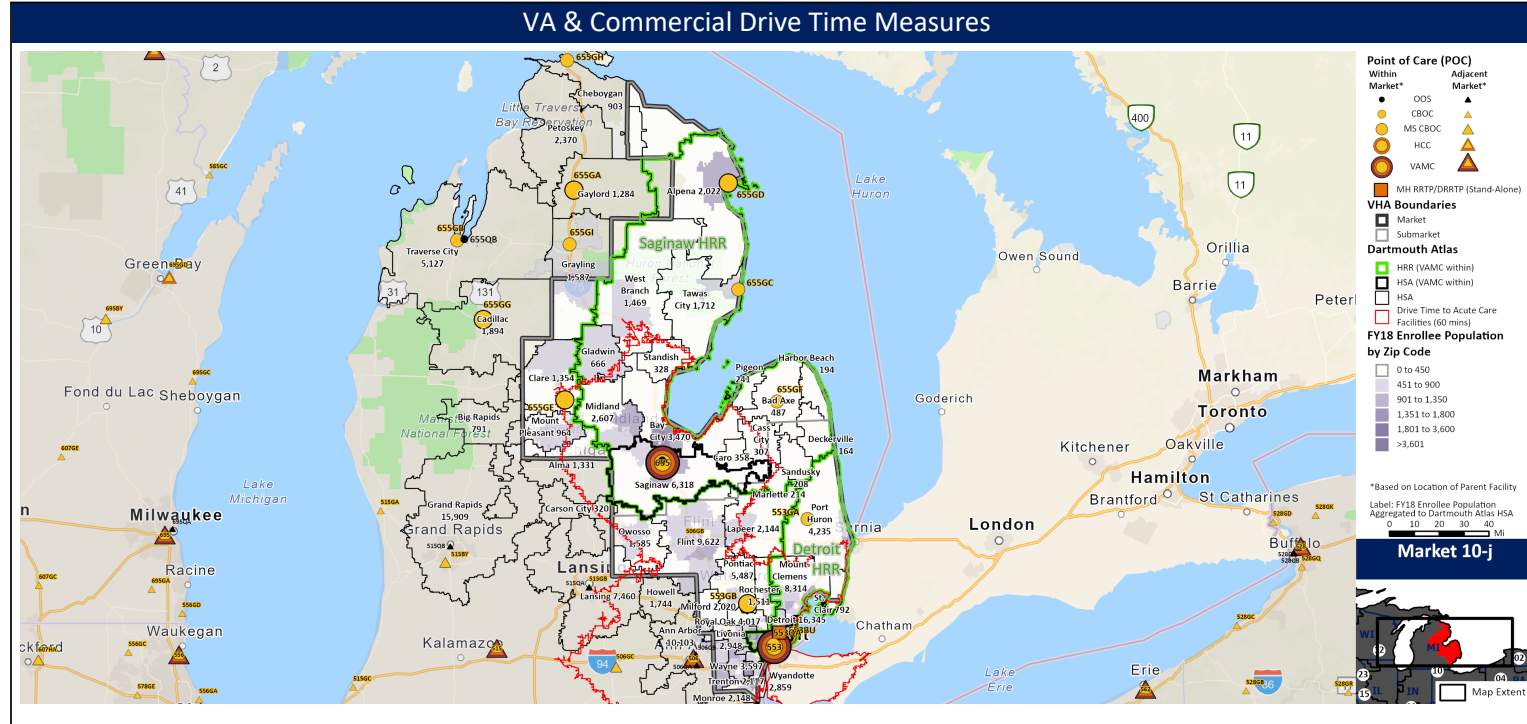
Source: VSSC No Show and Cancellation Cube

8.11.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Access ► Market/Parent Facility Existing VA Drive Times Assessment



Note: A Dartmouth Atlas Hospital Service Area (HSA) is a ZIP code-defined geography encompassing the community where the ZIP code's Medicare residents predominantly receive their hospital care. HSA total enrollees are displayed on map. A Dartmouth Atlas Hospital Referral Region (HRR) is a ZIP code-defined geography encompassing the community where the ZIP code's Medicare residents predominantly receive their cardiovascular and neurosurgery hospital care.

Source: 1. Dartmouth Atlas 2. Geocoded Enrollee File FY18Q4

8.12.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Access ► Drive Time Summary

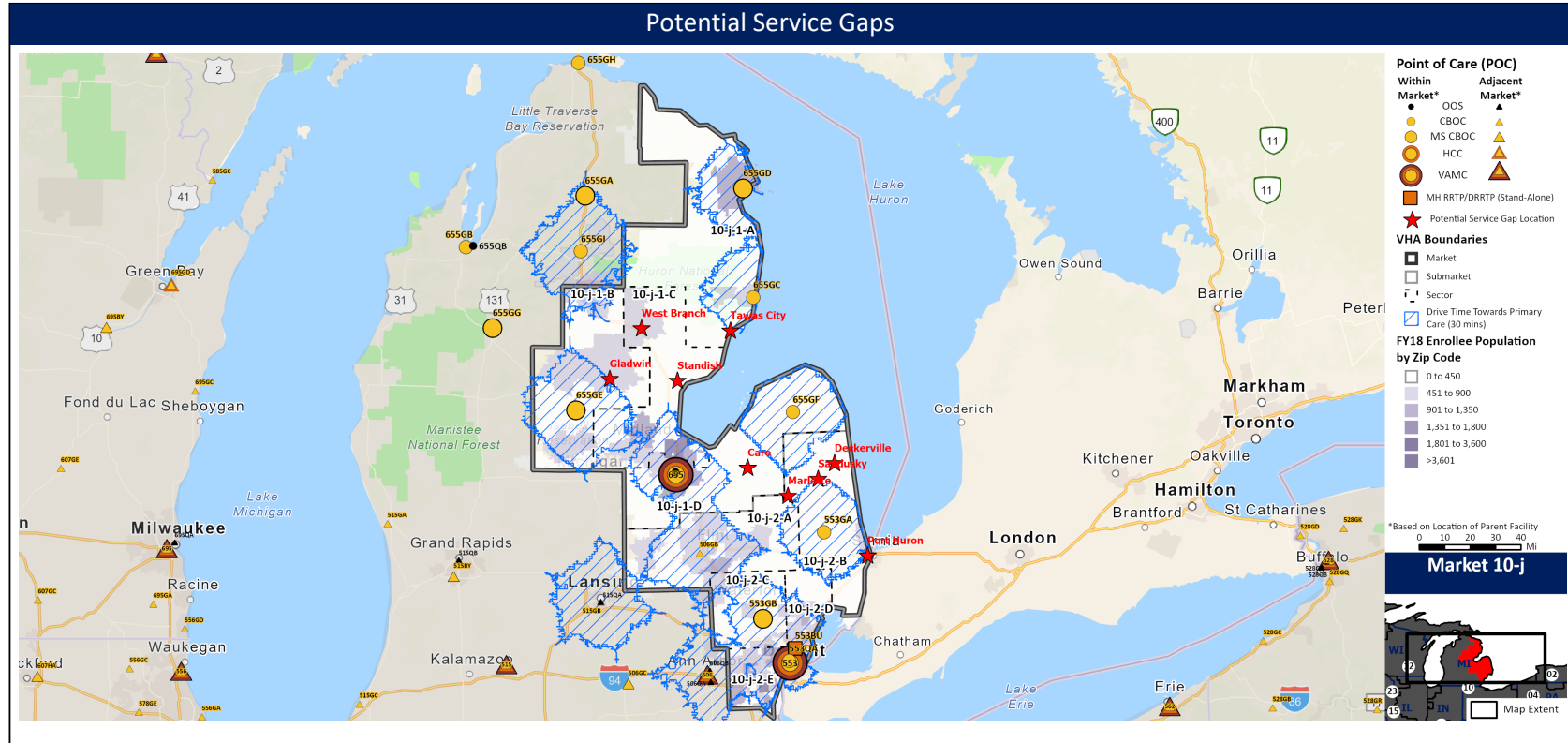
FY 2018	# of Total Enrollees	Primary Care				Secondary Care			
		# of enrollees within 30 minutes drive time	% of enrollees within 30 minutes	# of enrollees outside 30 minutes drive time	% of enrollees outside 30 minutes	# of enrollees within 60 minutes drive time	% of enrollees within 60 minutes	# of enrollees outside 60 minutes drive time	% of enrollees outside 60 minutes
(V10) Eastern Michigan	115,707	97,899	84.6%	17,808	15.4%	101,641	87.8%	14,066	12.2%



## VISN 10: Eastern Michigan Market

## Access ► Potential Service Gaps

Potential service gaps are areas identified by the Dartmouth Atlas in a Hospital Service Area (HSA). The medical community in these areas provides opportunities to consider different tactics to extend the VA network of care. Strategies for expansion might include telehealth, FQHC partnership, unique rural outreach, contracted provider(s), or a new VA asset. The following page shows the number of Enrollees that reside within a particular HSA. Planning best practice suggests that 4,800 enrollees are required to justify establishing a new site of care.



Source: 1. Dartmouth Atlas 2. Geocoded Enrollee File FY18Q4

8.14.V10.EasternMichigan#IMG



## VISN 10: Eastern Michigan Market

## Access ► Potential Service Gaps, cont.

Potential service gaps are areas identified by the Dartmouth Atlas in a Hospital Service Area (HSA). The medical community in these areas provides opportunities to consider different tactics to extend the VA network of care. Strategies for expansion might include telehealth, FQHC partnership, unique rural outreach, contracted provider(s), or a new VA asset. The table below shows the number of Enrollees that reside within a particular HSA. Planning best practice suggests that 4,800 enrollees are required to justify establishing a new site of care.

Existing VA Point of Care	Potential Service Gaps	Enrollees	Areas with VA Points of Care	Atlas HSA	Enrollees
No Current Facility Within 30 Minute Drive Time	Port Huron	4,205	(V10) (553BU) Detroit Domiciliary	Mount Clemens	8,63
	Tawas City	1,696		Warren	4,29
	West Branch	1,387		Grosse Pointe	53
	Gladwin	709	(V10) (553GB) Pontiac	Pontiac	5,26
	Standish	382		Royal Oak	3,97
	Caro	351		Rochester	1,52
	Marlette	214		Troy	1,40
	Sandusky	212	(V10) (553QA) Piquette Street	Farmington Hills	1,37
	Deckerville	166		Detroit	14,95
Areas with VA Points of Care	Atlas HSA	Enrollees	(V10) (655) Saginaw-Michigan	Southfield	1,36
				Madison Heights	79
(V10) (506) Ann Arbor-Michigan	Wayne	3,288	(V10) (655GD) Alpena	Saginaw	5,99
	Milford	1,971		Bay City	3,39
(V10) (506GB) Flint	Flint	10,429	(V10) (655GE) Clare	Alpena	1,98
	Lapeer	2,230		Midland	2,54
	Owosso	1,745	(V10) (655GF) Bad Axe	Clare	1,42
(V10) (553) Detroit-Michigan	Livonia	2,891		Mount Pleasant	83
	Wyandotte	2,616		Bad Axe	48
	Trenton	2,013		Cass City	29
	Dearborn	1,969		Pigeon	23
	Taylor	1,316		Harbor Beach	18
	Garden City	1,042			

Source: 1. Dartmouth Atlas 2. Geocoded Enrollee File FY18Q4

8.14.V10.EasternMichigan





## Quality & Satisfaction



## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► VA Patient Feedback: Survey of Enrollees – Eastern Michigan Market

Category	Sub-Category	National	Eastern Michigan Ma...
Insurance (Reliance)	Have Private Insurance Plan	27.6 %	31.2 %
	Planned Use of VA as Primary Source of Care	40.5 %	43.3 %
	Uninsured	19.2 %	19.2 %
Satisfaction (Best Care Anywhere)	Appointments are Always/Nearly Always Easy to Get with VA	45.3 %	50.1 %
	Very Satisfied with Respect Given by Health Care Professionals	72.3 %	70.1 %
	Very Satisfied with the Ability to Get Referrals	32.4 %	49.9 %
Access (Choose VA)	Believes Care in the Community is Easier to Get to than VA (Answered Yes)	66.0 %	71.5 %
	Believes Care in the Community Quality is Better than VA (Answered Yes)	43.0 %	43.0 %
Internet Use (Telehealth Potential)	Internet Use to Look at Health Information (Answered Yes)	76.1 %	67.4 %
	Used Internet to Make Medical Appointments (Answered Yes)	36.5 %	24.8 %

1. Satisfaction denominator = enrolled Veterans who said they had used VA since January 1, 2016

2. Access denominator = enrolled Veterans who said they had used a provider other than VA for some or all of their care since January 1, 2016

3. The denominator for Internet Use = enrolled Veterans who said they used the internet at least occasionally



## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► VA Patient Satisfaction – Inpatient

	% Reported as Always										% Definitely Yes	% Strongly Agree	% 9 or 10	% Yes	
Facility	Survey Date	Care Coord.	Cleanliness of Hospital Env't.	Comm about Meds	Comm w/ Doctors	Comm w/ Nurses	Pain Mgmt.	Comm about Pain	Quietness Of Hospital Env't.	Hosp. Staff Responsiveness	Recommend Hospital	Care Transition	Hosp. Rating	Discharge Info	Shared Decision Making
(V10) (553) Detroit-Michigan	2015	45.8	66.2	55.8	68.4	71.7	61.2	N/A	55.1	54.7	57.1	43.7	56.4	80.9	67.9
(V10) (553) Detroit-Michigan	2016	45.4	70.7	53.3	71.0	68.2	55.6	N/A	52.0	55.4	56.3	41.9	59.3	86.1	67.7
(V10) (553) Detroit-Michigan	2017	40.8	65.5	52.2	64.8	66.6	51.3	N/A	51.5	48.2	49.5	41.0	50.8	82.3	69.4
(V10) (553) Detroit-Michigan	2018	42.6	69.6	61.0	69.9	72.5	N/A	51.2	53.9	63.3	53.1	43.8	60.5	87.0	70.2
(V10) (655) Saginaw-Michigan	2015	58.2	80.9	75.9	79.8	82.7	66.7	N/A	70.9	71.8	74.7	57.1	76.5	89.1	83.9
(V10) (655) Saginaw-Michigan	2016	61.7	78.8	66.3	75.6	83.1	68.3	N/A	59.0	70.9	72.5	57.7	74.6	88.8	77.8
(V10) (655) Saginaw-Michigan	2017	59.7	78.0	69.8	76.8	79.8	67.9	N/A	65.3	68.0	72.3	55.3	78.3	90.4	83.0
(V10) (655) Saginaw-Michigan	2018	62.4	82.6	74.5	80.9	82.5	N/A	57.9	70.1	67.5	79.9	60.3	79.6	88.4	79.5
VISN 10 Average	2015	51.5	70.5	60.9	72.9	73.0	60.7	N/A	51.6	57.6	64.6	49.3	65.8	86.4	74.1
VISN 10 Average	2016	53.4	72.9	63.1	74.1	74.4	59.8	N/A	53.7	60.3	66.8	51.2	67.4	88.2	75.6
VISN 10 Average	2017	53.4	73.5	63.3	75.6	76.0	60.6	N/A	52.5	59.5	68.3	51.9	67.8	87.8	75.8
VISN 10 Average	2018	54.5	71.8	65.5	75.4	76.6	N/A	59.1	52.8	60.4	70.1	52.7	69.6	88.3	76.7
National Average	2015	52.0	69.9	61.2	73.8	72.1	60.1	N/A	49.3	58.8	65.5	49.7	64.3	84.7	74.0
National Average	2016	53.2	70.0	61.9	74.7	73.1	60.1	N/A	49.8	59.7	65.8	50.8	65.2	85.3	75.3
National Average	2017	53.2	69.6	62.6	75.1	73.5	59.5	N/A	50.1	59.7	66.7	52.0	65.4	85.6	75.4
National Average	2018	54.2	70.4	63.4	75.7	74.6	N/A	57.9	51.4	61.0	66.9	51.9	66.2	86.2	75.5

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.2.V10.EasternMichigan



## VISN 10: Eastern Michigan Market — Detroit-Michigan

# Quality & Satisfaction ▶ VA Market Facility Trends – Access/Quality/Patient Satisfaction

Measure	Measure Unit	Preferred Direction	16Q3	17Q3	18Q3	18Q3 Median
<b>Acute care mortality</b>						
1. Acute care Standardized Mortality Ratio (SMR)	O/E	↓	0.716	0.840	0.891	0.822
2. Acute care 30-day Standardized Mortality Ratio (SMR30)	O/E	↓	1.039	0.970	1.009	0.923
a. AMI RSMR	%	↓	10.423	10.423	7.913	7.741
b. CHF RSMR	%	↓	7.160	7.160	6.753	6.843
c. Pneumonia RSMR	%	↓	8.290	8.290	9.026	9.351
d. COPD RSMR	%	↓			4.440	5.805
e. Stroke RSMR	%	↓			5.963	6.148
<b>Avoidable adverse events</b>						
1. In-hospital complications	O/E	↓	1.028	0.592	0.508	0.838
2. Healthcare associated infections (HAI)						
a. Catheter associated urinary tract infection	inf/1k device days	↓	0.288	0.099	0.534	0.467
b. Central line associated bloodstream infection	inf/1k device days	↓	0.059	0.733	0.059	0.364
c. Ventilator associated events (IVAC Plus)	events/1k device days	↓	1.621	0.000	0.000	0
d. Methicillin-resistant Staphylococcus aureus (MRSA) infection	inf/1k bed days	↓	0.180	0.071	0.067	0.056
e. C. difficile infection	inf/10k bed days	↓			9.508	5.597
3. Patient safety indicator (PSI)	O/E	↓	0.244	0.423	0.751	0.36
4. Post acute care events	O/E	↓			0.862	0.924
<b>Length of Stay and Utilization Management</b>						
1. Adjusted length of stay	days	↓	4.423	4.446	4.655	4.324
2. Utilization management						
a. Admission reviews met, adjusted	%	↑	80.569	81.602	84.884	76.042
b. Continued stay reviews met, adjusted	%	↑	79.076	77.286	79.027	67.607
<b>Care Transition</b>						
1. Ambulatory Care Sensitive Condition hospitalizations	hosp/1000 pts	↓	25.834	20.877	21.007	25.055
2. Hospital-wide 30-day readmission rate	%	↓	13.046	11.184	10.692	11.458
a. Cardiopulmonary cohort	%	↓	14.056	15.896	10.677	12.922
b. Cardiovascular cohort	%	↓	14.341	11.559	8.639	10.095
c. Medicine cohort	%	↓	13.754	11.930	12.689	12.825
d. Neurology cohort	%	↓	14.403	7.846	1.828	8.987
e. Surgical cohort	%	↓	9.588	6.838	10.300	8.482
3. Disease specific 30-day readmission rate						
a. AMI RSRR	%	↓				16.753
b. CHF RSRR	%	↓	19.843	19.843	18.613	18.794
c. Pneumonia RSRR	%	↓	15.492	15.492	13.320	14.527
d. COPD RSRR	%	↓			13.287	15.365
e. Stroke RSRR	%	↓			10.360	10.046
<b>Patient Experience</b>						
1. Overall rating of hospital (inpatient)	wct %	↑	59.865	54.594	55.805	67.139
2. Overall rating of primary care providers	wct %	↑	64.347	68.285	67.492	70.75
3. Overall rating of specialty care providers	wct %	↑	54.983	57.334	63.770	69.166
4. Care Transition (inpatient)	wct %	↑			45.288	51.814
5. PCMH Stress Discussed (Q40)	wct %	↑			53.497	59.113

Source: SAIL Scorecards

9.3.V10.EasternMichigan.553



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Quality &amp; Satisfaction ► VA Market Facility Trends – Access/Quality/Patient Satisfaction, cont.

Measure	Measure Unit	Preferred Direction	16Q3	17Q3	18Q3	18Q3 Median
<b>Employee Satisfaction</b>						
1. Best place to work	score (1-100)	↑	57.663	53.702	60.746	65.152
a. Overall job satisfaction	score (1-5)	↑	3.646	3.656	3.749	3.82
b. Satisfaction with organization	score (1-5)	↑	3.378	3.287	3.487	3.616
c. Recommend my organization as a good place to work	score (1-5)	↑	3.649	3.480	3.696	3.833
2. Registered nurse turnover rate	%	↓	5.787	3.342	2.163	5.163
<b>Performance measures</b>						
1. Inpatient performance measures (ORYX)	%	↑	77.192	87.566	91.905	83.07
2. Outpatient performance measures (HED90_1)	wct %	↑			87.531	88.767
3. Outpatient performance measures (HED90_ec)	%	↑			78.356	78.367
<b>Access</b>						
1. PCMH / Specialty Care Access questions						
a. PCMH timely appointment, care and information	wct %	↑	52.148	51.372	49.477	53.032
b. Specialty Care timely appointment, care and information	wct %	↑		44.317	46.139	50.83
c. Days Waited for Urgent Appointment (PCMH)	wct %	↑	52.553	34.413	37.165	40.916
d. Get an urgent care appointment as soon as needed (SC)			36.657			
d. Get a routine care appointment as soon as needed (SC)			44.408			
2. Wait times						
a. Primary care new patient wait time <=30 days from create date	%	↑	99.591	99.559	93.283	80.444
b. Specialty care new patient wait time <=30 days from create date	%	↑	86.887	88.380	79.902	75.419
c. Mental health care new patient wait time <=30 days from create date	%	↑	99.833	98.005	94.325	92.311
3. Call center responsiveness						
a. Call center speed in responding to calls in seconds	seconds	↓	26.151	24.197	24.648	50.698
b. Call center abandonment rate	%	↓	3.433	2.280	2.178	6.704
<b>Mental Health</b>						
	Standardized score	↑	-1.046	-1.411	-0.662	0.326
1. Population coverage	Standardized score	↑	-0.762	-1.067	-0.689	-0.248
2. Continuity of care	Standardized score	↑	-0.630	-0.321	0.975	0.855
3. Experience of care	Standardized score	↑	-0.900	-1.606	-1.744	0.066
<b>Efficiency and Capacity</b>						
1. Efficiency (1/SFA)	Score (0-100)	↑	96.153	96.983	96.753	94.096
2. Physician Capacity	%	↓		2.274	2.362	7.505

VAMC FY18 Star Rating: 3

Detroit VAMC Summary for all 3 Quarters			
Above Highest Benchmark of 10th or 90th Percentile	Superior	15	10%
Between Median and Favorable Percentile	Good	53	36%
Between Median and Unfavorable Percentile	Acceptable	63	43%
Below Lowest Benchmark of 10th or 90th Percentile	Needs Improvement	17	11%
<b>Total</b>		<b>148</b>	<b>100%</b>

Note: Performance Measures cited above represent composite measures. Some measures have changed, but appear to be relatively close to current measures and therefore are reported for periods shown (PCMH Timely Appointments, Days Waited for Urgent Appointment).



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Quality &amp; Satisfaction ▶ VA Market Facility Trends – Access/Quality/Patient Satisfaction

Measure	Measure Unit	Preferred Direction	16Q3	17Q3	18Q3	18Q3 Median
<b>Acute care mortality</b>						
1. Acute care Standardized Mortality Ratio (SMR)	O/E	↓	0.906	0.244	0.423	0.822
2. Acute care 30-day Standardized Mortality Ratio (SMR30)	O/E	↓	0.707	0.961	0.902	0.923
a. AMI RSRR	%	↓				7.741
b. CHF RSRR	%	↓	7.229	7.229	6.070	6.843
c. Pneumonia RSRR	%	↓	8.402	8.402	8.895	9.351
d. COPD RSRR	%	↓			5.650	5.805
e. Stroke RSRR	%	↓				6.148
<b>Avoidable adverse events</b>						
1. In-hospital complications	O/E	↓	1.244	1.317	0.000	0.838
2. Healthcare associated infections (HAI)						
a. Catheter associated urinary tract infection	inf/1k device days	↓	0.000	0.000	0.000	0.467
b. Central line associated bloodstream infection	inf/1k device days	↓		0.000	0.000	0.364
c. Ventilator associated events (IVAC Plus)	events/1k device days	↓				0
d. Methicillin-resistant Staphylococcus aureus (MRSA) infection	inf/1k bed days	↓	0.838	0.000	0.000	0.056
e. C. difficile infection	inf/10k bed days	↓			0.000	5.597
3. Patient safety indicator (PSI)	O/E	↓	0.825	1.047	1.077	0.36
4. Post acute care events	O/E	↓				0.924
<b>Length of Stay and Utilization Management</b>						
1. Adjusted length of stay	days	↓	2.961	3.324	3.597	4.324
2. Utilization management						
a. Admission reviews met, adjusted	%	↑	93.622	89.957	92.859	76.042
b. Continued stay reviews met, adjusted	%	↑	87.799	74.665	84.952	67.607
<b>Care Transition</b>						
1. Ambulatory Care Sensitive Condition hospitalizations	hosp/1000 pts	↓	19.970	24.939	21.819	25.055
2. Hospital-wide 30-day readmission rate	%	↓	8.514	14.347	3.097	11.458
a. Cardiorespiratory cohort	%	↓	9.247	12.069	6.673	12.922
b. Cardiovascular cohort	%	↓	0.000	0.000	0.000	10.095
c. Medicine cohort	%	↓	9.375	17.754	4.791	12.825
d. Neurology cohort	%	↓	7.181	0.000	0.000	8.987
e. Surgical cohort	%	↓	0.000	0.000		8.482
3. Disease specific 30-day readmission rate						
a. AMI RSRR	%	↓				16.753
b. CHF RSRR	%	↓	18.411	18.411	18.365	18.794
c. Pneumonia RSRR	%	↓	14.696	14.696	10.308	14.527
d. COPD RSRR	%	↓			14.804	15.365
e. Stroke RSRR	%	↓				10.046
<b>Patient Experience</b>						
1. Overall rating of hospital (inpatient)	wct %	↑	76.458	76.001	80.438	67.139
2. Overall rating of primary care providers	wct %	↑	64.728	68.893	70.352	70.75
3. Overall rating of specialty care providers	wct %	↑	72.685	66.017	70.024	69.166
4. Care Transition (inpatient)	wct %	↑			61.671	51.814
5. PCMH Stress Discussed (Q40)	wct %	↑			60.772	59.113

Source: SAIL Scorecards

9.3.V10.EasternMichigan.655



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Quality & Satisfaction ▶ VA Market Facility Trends – Access/Quality/Patient Satisfaction, cont.

Measure	Measure Unit	Preferred Direction	16Q3	17Q3	18Q3	18Q3 Median
<b>Employee Satisfaction</b>						
1. Best places to work	score (1-100)	↑	65.231	67.179	68.245	65.152
a. Overall job satisfaction	score (1-5)	↑	3.735	3.829	3.901	3.82
b. Satisfaction with organization	score (1-5)	↑	3.588	3.669	3.714	3.616
c. Recommend my organization as a good place to work	score (1-5)	↑	3.861	3.803	3.995	3.833
2. Registered nurse turnover rate	%	↓	5.457	4.367	4.476	5.163
<b>Performance measures</b>						
1. Inpatient performance measures (ORYX)	%	↑	90.818	89.339	89.345	83.07
2. Outpatient performance measures (HED90_1)	wct %	↑			87.602	88.767
3. Outpatient performance measures (HED90_ec)	%	↑			80.442	78.367
<b>Access</b>						
1. PCMH / Specialty Care Access questions						
a. PCMH timely appointment, care and information	wct %	↑	64.694	53.850	53.950	53.032
b. Specialty Care timely appointment, care and information	wct %	↑		53.249	53.700	50.83
c. Days Waited for Urgent Appointment (PCMH)	wct %	↑	48.697	34.585	40.742	40.916
c. Get an urgent care appointment as soon as needed (SC)			42.677			
d. Get a routine care appointment as soon as needed (SC)			57.473			
2. Wait times						
a. Primary care new patient wait time <=30 days from create date	%	↑	99.829	99.871	84.433	80.444
b. Specialty care new patient wait time <=30 days from create date	%	↑	82.677	88.145	77.568	75.419
c. Mental health care new patient wait time <=30 days from create date	%	↑	99.697	99.851	96.002	92.311
3. Call center responsiveness						
a. Call center speed in responding to calls in seconds	seconds	↓	46.132	51.905	51.735	50.698
b. Call center abandonment rate	%	↓	4.775	5.208	4.792	6.704
<b>Mental Health</b>						
1. Population coverage	Standardized score	↑	1.068	0.982	0.345	0.326
2. Continuity of care	Standardized score	↑	0.168	-0.438	-0.404	-0.248
3. Experience of care	Standardized score	↑	1.214	1.353	1.035	0.855
<b>Efficiency and Capacity</b>						
1. Efficiency (1/SFA)	Score (0-100)	↑	87.063	96.226	96.075	94.096
2. Physician Capacity	%	↓		14.050	24.729	7.505

VAMC FY18 Star Rating: 5

Saginaw VAMC Summary for all 3 Quarters			
Above Highest Benchmark of 10th or 90th Percentile	Superior	47	34%
Between Median and Favorable Percentile	Good	64	47%
Between Median and Unfavorable Percentile	Acceptable	22	16%
Below Lowest Benchmark of 10th or 90th Percentile	Needs Improvement	4	3%
<b>Total</b>		<b>137</b>	<b>100%</b>

Note: Performance Measures cited above represent composite measures. Some measures have changed, but appear to be relatively close to current measures and therefore are reported for periods shown (PCMH Timely Appointments, Days Waited for Urgent Appointment).



## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (PCMH)

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (506GB) Flint	2015	25.7	N/A	64.1	67.0	52.8	N/A
(V10) (506GB) Flint	2016	29.9	49.9	65.5	61.6	58.6	N/A
(V10) (506GB) Flint	2017	40.0	52.5	69.5	76.9	59.5	N/A
(V10) (506GB) Flint	2018	39.5	52.8	71.5	77.9	57.0	74.8
(V10) (553) Detroit-Michigan	2015	34.9	N/A	67.9	51.4	62.1	N/A
(V10) (553) Detroit-Michigan	2016	49.3	52.7	70.0	56.6	64.0	N/A
(V10) (553) Detroit-Michigan	2017	49.1	58.4	73.6	61.8	67.8	N/A
(V10) (553) Detroit-Michigan	2018	45.4	50.9	71.9	61.0	63.4	73.6
(V10) (553GA) Yale	2015	36.3	N/A	85.8	81.4	85.9	N/A
(V10) (553GA) Yale	2016	62.4	75.6	88.5	86.4	80.4	N/A
(V10) (553GA) Yale	2017	64.2	75.9	88.8	89.8	87.3	N/A
(V10) (553GA) Yale	2018	62.2	74.7	88.8	89.1	83.1	93.3
(V10) (553GB) Pontiac	2015	36.5	N/A	69.7	58.7	66.0	N/A
(V10) (553GB) Pontiac	2016	52.7	62.6	77.9	67.4	71.6	N/A
(V10) (553GB) Pontiac	2017	54.0	66.3	77.1	67.8	70.1	N/A
(V10) (553GB) Pontiac	2018	65.5	68.6	82.9	66.2	78.8	84.6
(V10) (655) Saginaw-Michigan	2015	36.7	N/A	67.4	61.4	66.6	N/A
(V10) (655) Saginaw-Michigan	2016	49.1	53.6	71.4	69.7	63.9	N/A
(V10) (655) Saginaw-Michigan	2017	50.2	57.8	72.5	70.9	67.5	N/A
(V10) (655) Saginaw-Michigan	2018	52.7	57.6	73.6	74.4	67.3	86.5

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.4.V10.EasternMichigan





## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (PCMH), cont.

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (655GA) Gaylord - (V10) Mi...	2015	37.7	N/A	75.9	84.8	68.7	N/A
(V10) (655GA) Gaylord - (V10) Mi...	2016	59.2	65.4	80.6	79.3	76.4	N/A
(V10) (655GA) Gaylord - (V10) Mi...	2017	49.2	57.6	77.3	69.2	63.7	N/A
(V10) (655GA) Gaylord - (V10) Mi...	2018	53.6	66.3	78.3	79.7	70.5	77.1
(V10) (655GB) Traverse City - (V1...	2015	36.5	N/A	69.2	77.3	65.0	N/A
(V10) (655GB) Traverse City - (V1...	2016	53.3	63.6	78.3	77.6	74.4	N/A
(V10) (655GB) Traverse City - (V1...	2017	55.2	66.6	78.4	78.6	68.1	N/A
(V10) (655GB) Traverse City - (V1...	2018	56.7	64.9	75.7	79.1	63.2	83.4
(V10) (655GC) Oscoda	2015	43.4	N/A	73.9	78.6	69.6	N/A
(V10) (655GC) Oscoda	2016	58.5	72.1	81.9	76.7	72.1	N/A
(V10) (655GC) Oscoda	2017	54.2	71.0	79.0	78.8	69.1	N/A
(V10) (655GC) Oscoda	2018	58.7	70.5	81.2	73.6	74.0	84.9
(V10) (655GD) Alpena	2015	50.2	N/A	80.5	80.3	75.5	N/A
(V10) (655GD) Alpena	2016	57.7	64.6	83.7	82.0	71.8	N/A
(V10) (655GD) Alpena	2017	61.5	62.7	78.9	83.6	73.2	N/A
(V10) (655GD) Alpena	2018	62.1	65.3	78.3	82.9	73.0	84.3
(V10) (655GE) Clare	2015	43.5	N/A	70.3	76.2	68.1	N/A
(V10) (655GE) Clare	2016	58.0	62.9	81.8	79.2	71.2	N/A
(V10) (655GE) Clare	2017	59.8	64.6	83.0	78.2	75.5	N/A
(V10) (655GE) Clare	2018	56.1	66.7	80.6	77.1	73.8	85.6

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.4.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (PCMH), cont.

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (655GF) Bad Axe	2015	33.5	N/A	47.6	85.0	40.5	N/A
(V10) (655GF) Bad Axe	2016	57.5	57.5	74.2	89.8	65.0	N/A
(V10) (655GF) Bad Axe	2017	59.9	56.9	77.3	81.0	70.4	N/A
(V10) (655GF) Bad Axe	2018	58.2	69.8	90.4	86.9	88.1	90.9
(V10) (655GG) Cadillac - (V10) Mi...	2015	42.6	N/A	69.3	79.5	62.7	N/A
(V10) (655GG) Cadillac - (V10) Mi...	2016	59.9	65.0	78.5	76.6	73.8	N/A
(V10) (655GG) Cadillac - (V10) Mi...	2017	51.2	62.9	73.8	77.2	70.2	N/A
(V10) (655GG) Cadillac - (V10) Mi...	2018	48.4	58.8	73.3	74.9	67.6	83.3
(V10) (655GH) Cheboygan Count...	2015	43.5	N/A	64.5	73.9	54.2	N/A
(V10) (655GH) Cheboygan Count...	2016	58.5	58.3	74.6	83.5	62.8	N/A
(V10) (655GH) Cheboygan Count...	2017	62.5	56.7	77.2	84.2	74.3	N/A
(V10) (655GH) Cheboygan Count...	2018	57.0	55.5	73.6	76.5	62.7	81.5
(V10) (655GI) Grayling - (V10) Mi...	2015	49.8	N/A	83.0	87.8	76.8	N/A
(V10) (655GI) Grayling - (V10) Mi...	2016	63.8	69.1	84.4	84.4	75.9	N/A
(V10) (655GI) Grayling - (V10) Mi...	2017	60.0	70.0	85.8	82.1	85.3	N/A
(V10) (655GI) Grayling - (V10) Mi...	2018	51.5	70.5	84.4	83.6	80.2	89.6
VISN 10 Average	2015	38.6	N/A	71.6	67.9	66.4	N/A
VISN 10 Average	2016	51.3	59.7	76.8	72.0	69.7	N/A
VISN 10 Average	2017	50.8	60.3	76.9	73.1	71.1	N/A
VISN 10 Average	2018	52.4	60.9	78.4	73.1	70.9	82.9

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.4.V10.EasternMichigan#3



## VISN 10: Eastern Michigan Market

## Quality &amp; Satisfaction ► VA Patient Satisfaction – Outpatient (PCMH), cont.

Facility	% Always					% 9 or 10	
	Survey Date	Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
National Average	2015	37.4	N/A	70.9	66.2	65.2	N/A
National Average	2016	49.2	58.4	75.6	69.1	68.1	N/A
National Average	2017	49.8	58.7	75.8	70.0	68.9	N/A
National Average	2018	51.3	60.1	77.1	71.0	69.7	80.3

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.4.V10.EasternMichigan#4



## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (Specialty Care)

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (506GB) Flint	2016	61.7%	58.2%	79.9%	86.7%	72.1%	N/A
(V10) (506GB) Flint	2017	21.8%	29.1%	48.9%	63.8%	37.0%	N/A
(V10) (506GB) Flint	2018	N/A	69.1%	65.2%	46.4%	N/A	100.0%
(V10) (553) Detroit	2016	41.4%	49.8%	66.5%	60.3%	52.1%	N/A
(V10) (553) Detroit	2017	44.4%	52.9%	66.3%	64.9%	59.4%	N/A
(V10) (553) Detroit	2018	41.7%	54.8%	68.6%	64.6%	61.6%	75.3%
(V10) (553GA) Yale	2016	46.7%	74.4%	46.7%	46.7%	46.7%	N/A
(V10) (553GB) Pontiac	2016	73.7%	75.6%	88.3%	83.8%	75.3%	N/A
(V10) (553GB) Pontiac	2017	64.3%	60.7%	86.3%	68.0%	83.8%	N/A
(V10) (553GB) Pontiac	2018	54.5%	50.2%	90.0%	61.6%	82.8%	85.7%
(V10) (655) Saginaw	2016	49.6%	55.8%	75.1%	70.6%	67.3%	N/A
(V10) (655) Saginaw	2017	48.3%	56.4%	73.7%	72.0%	66.0%	N/A
(V10) (655) Saginaw	2018	56.6%	55.2%	76.0%	77.2%	69.7%	85.5%
(V10) (655GA) Gaylord - (V10) Mi...	2016	44.1%	52.0%	59.4%	70.3%	58.2%	N/A
(V10) (655GA) Gaylord - (V10) Mi...	2017	64.2%	66.2%	86.8%	85.2%	90.8%	N/A
(V10) (655GA) Gaylord - (V10) Mi...	2018	48.2%	68.2%	90.6%	64.7%	67.5%	85.5%
(V10) (655GB) Traverse City - (V1...	2016	55.3%	59.7%	65.4%	85.2%	67.0%	N/A
(V10) (655GB) Traverse City - (V1...	2017	88.9%	72.2%	100.0%	100.0%	80.3%	N/A
(V10) (655GB) Traverse City - (V1...	2018	78.6%	63.4%	66.3%	95.9%	76.5%	96.2%
(V10) (655GC) Oscoda	2016	75.9%	57.9%	89.3%	100.0%	100.0%	N/A

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.5.V10.EasternMichigan



## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ▶ VA Patient Satisfaction – Outpatient (Specialty Care), cont.

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (655GC) Oscoda	2017	81.5%	54.2%	61.3%	76.0%	75.6%	N/A
(V10) (655GC) Oscoda	2018	82.6%	65.3%	100.0%	74.0%	100.0%	100.0%
(V10) (655GD) Alpena	2016	91.1%	68.5%	54.7%	100.0%	44.1%	N/A
(V10) (655GD) Alpena	2017	44.1%	27.9%	52.9%	100.0%	55.9%	N/A
(V10) (655GD) Alpena	2018	100.0%	100.0%	100.0%	100.0%	100.0%	53.0%
(V10) (655GE) Clare	2016	54.2%	45.5%	80.2%	59.9%	59.2%	N/A
(V10) (655GE) Clare	2017	38.9%	36.5%	80.6%	53.7%	73.7%	N/A
(V10) (655GE) Clare	2018	47.0%	83.7%	84.5%	85.3%	47.5%	88.2%
(V10) (655GF) Bad Axe	2016	90.3%	85.5%	85.5%	85.5%	85.5%	N/A
(V10) (655GF) Bad Axe	2017	59.4%	63.3%	92.3%	100.0%	56.4%	N/A
(V10) (655GF) Bad Axe	2018	N/A	N/A	100.0%	100.0%	100.0%	100.0%
(V10) (655GG) Cadillac - (V10) Mi...	2016	36.3%	62.8%	78.3%	84.9%	76.3%	N/A
(V10) (655GG) Cadillac - (V10) Mi...	2017	60.3%	57.3%	83.3%	82.2%	75.9%	N/A
(V10) (655GG) Cadillac - (V10) Mi...	2018	41.4%	48.6%	69.0%	80.5%	65.4%	80.2%
(V10) (655GH) Cheboygan Count...	2016	50.0%	66.7%	97.7%	100.0%	100.0%	N/A
(V10) (655GH) Cheboygan Count...	2017	83.5%	56.8%	81.4%	83.8%	74.1%	N/A
(V10) (655GH) Cheboygan Count...	2018	56.9%	70.7%	73.5%	81.6%	65.8%	65.8%
(V10) (655GI) Grayling - (V10) Mi...	2016	72.4%	85.1%	93.6%	88.4%	70.9%	N/A
(V10) (655GI) Grayling - (V10) Mi...	2017	39.2%	53.9%	73.0%	88.4%	70.7%	N/A
(V10) (655GI) Grayling - (V10) Mi...	2018	81.1%	75.9%	84.0%	94.1%	71.6%	86.8%

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.5.V10.EasternMichigan#2



## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (Specialty Care), cont.

Facility	% Always					% 9 or 10	
	Survey Date	Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
VISN 10 Average	2016	46.7%	54.8%	73.2%	71.0%	64.9%	N/A
VISN 10 Average	2017	49.9%	57.5%	75.3%	72.4%	68.6%	N/A
VISN 10 Average	2018	49.4%	58.8%	76.0%	73.3%	69.5%	83.2%
National Average	2016	47.3%	55.1%	73.2%	69.1%	65.4%	N/A
National Average	2017	48.7%	56.2%	74.2%	70.4%	66.8%	N/A
National Average	2018	49.7%	57.1%	75.3%	71.7%	68.4%	81.0%

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.5.V10.EasternMichigan#3



## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► VA Patient Satisfaction – Community Care

Facility	Survey Date	% 9 or 10	% Always								% Strongly Agree		% Very Satisfied or Satisfied
		Provider Rating	Community Care Received	Communication	Provider Aware History	Provider Informed	VA Provider Informed	Next Step Clear	Test Follow-up	Test Result to VA	First Appt. Soon as Needed	First Appt. Easy to Get	Overall Satisfaction
(V10) (553) Detroit-Michigan	2016	49.9	28.6	54.3	39.3	35.3	34.9	38.2	35.2	28.3	67.3	66.7	77.5
(V10) (553) Detroit-Michigan	2017	60.8	47.8	54.1	47.5	41.4	33.9	41.7	75.9	42.2	54.8	51.2	68.5
(V10) (553) Detroit-Michigan	2018	51.8	64.9	57.5	47.4	41.6	39.4	40.2	39.9	52.0	48.0	49.9	82.1
(V10) (655) Saginaw-Michigan	2016	60.2	35.9	63.0	54.0	25.2	39.4	33.4	54.9	61.0	44.2	57.6	63.5
(V10) (655) Saginaw-Michigan	2017	59.6	48.8	65.0	53.2	39.4	36.0	42.5	51.2	59.0	57.3	50.8	65.7
(V10) (655) Saginaw-Michigan	2018	63.7	51.7	63.1	52.1	47.5	40.7	42.7	50.0	72.5	57.5	61.6	79.2
VISN 10 Average	2016	65.8	58.1	67.0	54.2	52.3	51.3	51.4	59.5	61.3	68.4	68.7	77.4
VISN 10 Average	2017	66.4	59.4	67.5	53.0	48.3	47.1	48.3	56.8	63.6	62.5	62.6	76.1
VISN 10 Average	2018	66.5	58.6	68.4	51.6	47.0	46.3	48.3	52.5	69.2	64.6	65.7	79.9
National Average	2016	58.8	50.4	63.7	47.0	42.2	41.0	42.7	51.6	59.6	59.9	59.8	71.7
National Average	2017	62.1	54.2	66.4	49.2	44.5	43.7	45.2	53.4	60.6	62.1	62.2	74.0
National Average	2018	64.5	55.3	68.0	51.0	45.7	44.8	47.0	54.9	62.5	66.0	66.1	76.9

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.12.V10.EasternMichigan



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Quality & Satisfaction ► Quality of Community Hospitals – Detroit-Michigan Area

	ST JOSEPH MERCY CHELSEA	PROVIDENCE - PROVIDENCE PARK HOSPITAL	ST JOSEPH MERCY HOSPITAL	BEAUMONT HOSPITAL, GROSSE POINTE	UNIVERSITY OF MICHIGAN HEALTH SYSTEM	TOLEDO HOSPITAL THE	BEAUMONT HOSPITAL, TROY	HENRY FORD WEST BLOOMFIELD HOSPITAL	BEAUMONT HOSPITAL - TRENTON	HURON VALLEY-SINAI HOSPITAL
Quality Rank for Overall Quality	1	2	3	4	5	6	7	8	9	10
Hospital Type	Acute	Acute	Acute	Acute	Acute	Acute	Acute	Acute	Acute	Acute
ACS - Trauma Center	No	Level II	Level I	Level III	No	Level I	Level II	Level III	Level II	No
Academic Medical Center	No	No	No	No	Yes	No	No	No	No	No
Quality Rank in the U.S. for Overall Quality	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%	21-40%	21-40%
CMS Hospital Star Rating	5	4	3	4	5	5	5	5	5	3
Truven Everest Award	No	No	Yes	No	No	No	No	No	No	No
Truven 100 Top Hospitals	No	Yes	No	No	No	No	No	No	No	No
Leapfrog Top Hospitals	No	No	No	No	No	No	No	Yes	No	No
US News & World Report Top Hospitals	No	No	No	No	Yes	No	Yes	No	No	No
Patients who gave their hospital a rating of 9 or 10 on a scale	89.0%	74.0%	81.0%	78.0%	79.0%	69.0%	75.0%	83.0%	78.0%	74.0%
Estimated Inpatient Surgeries	1,453	9,399	7,648	2,576	20,295	10,557	8,184	2,981	2,452	2,320
Estimated Outpatient Surgeries	6,043	13,752	14,233	4,483	32,994	14,975	13,624	6,587	6,411	5,397
ED Visits	19,118	124,183	87,431	39,552	105,651	103,003	108,143	43,283	39,494	30,552
Mortality Rate (AMI)	0.0%	11.4%	10.8%	11.4%	10.3%	12.0%	11.7%	12.7%	12.1%	13.1%
Mortality Rate (CHF)	12.1%	8.9%	9.6%	7.9%	9.1%	10.3%	8.5%	9.9%	10.5%	11.0%
Mortality Rate (Pneumonia)	14.0%	12.9%	14.0%	12.4%	11.3%	13.8%	12.4%	12.5%	12.3%	14.0%
Mortality Rate (COPD)	7.4%	5.7%	6.6%	6.7%	6.8%	8.3%	7.2%	7.7%	6.9%	7.7%
All Cause Hospital-Wide Readmission Rate	14.5%	15.4%	15.0%	16.4%	15.3%	14.3%	16.0%	14.9%	14.5%	15.4%
Readmission Rate (AMI)	0.0%	11.4%	10.8%	11.4%	10.3%	12.0%	11.7%	12.7%	12.1%	13.1%
Readmission Rate (CHF)	12.1%	8.9%	9.6%	7.9%	9.1%	10.3%	8.5%	9.9%	10.5%	11.0%
Readmission Rate (Pneumonia)	14.0%	12.9%	14.0%	12.4%	11.3%	13.8%	12.4%	12.5%	12.3%	14.0%
Readmission Rate (COPD)	7.4%	5.7%	6.6%	6.7%	6.8%	8.3%	7.2%	7.7%	6.9%	7.7%

Note: Data is reported by provider number and may include multi-campus hospitals reporting under a single provider number, N/A = Not Applicable

Source: 1. Best Care Report 2. Definitive Healthcare

9.6.V10.EasternMichigan.553





## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Quality & Satisfaction ▶ Quality of Community Hospitals – Saginaw-Michigan Area

	SAINT MARY'S STANDISH COMMUNITY HOSPITAL	MARLETTE REGIONAL HOSPITAL	MIDMICHIGAN MEDICAL CENTER- CLARE	MIDMICHIGAN MEDICAL CENTER - WEST BRANCH	GENESYS REGIONAL MEDICAL CENTER - HEALTH PARK	MIDMICHIGAN MEDICAL CENTER- MIDLAND	MIDMICHIGAN MEDICAL CENTER- GRATIOT	MEMORIAL HEALTHCARE	COVENANT MEDICAL CENTER	MCLAREN LAPEER REGION
Quality Rank for Overall Quality	1	2	3	4	5	6	7	8	9	10
Hospital Type	CAH	CAH	Acute	Acute	Acute	Acute	Acute	Acute	Acute	Acute
ACS - Trauma Center	No	No	No	No	Level II	Level II	No	No	Level II	Level II
Academic Medical Center	No	No	No	No	No	No	No	No	No	No
Quality Rank in the U.S. for Overall Quality	Best 20%	Best 20%	21-40%	41-60%	41-60%	41-60%	41-60%	41-60%	61-80%	61-80%
CMS Hospital Star Rating	5	4	4	4	2	3	3	3	2	3
Truven Everest Award	No	No	No	No	No	No	No	No	No	No
Truven 100 Top Hospitals	No	No	No	No	No	No	No	No	No	No
Leapfrog Top Hospitals	No	No	No	No	No	No	No	No	No	No
US News & World Report Top Hospitals	No	No	No	No	No	No	No	No	No	No
Patients who gave their hospital a rating of 9 or 10 on a scale	79.0%	84.0%	76.0%	79.0%	71.0%	77.0%	77.0%	75.0%	77.0%	60.0%
Estimated Inpatient Surgeries	208	332	132	695	5,285	3,107	1,020	557	6,947	2,012
Estimated Outpatient Surgeries	739	1,184	2,368	3,019	9,116	10,940	7,977	3,201	7,352	4,784
ED Visits	10,119	11,611	15,318	13,912	70,819	35,867	20,966	27,515	92,411	32,893
Mortality Rate (AMI)	0.0%	0.0%	0.0%	13.2%	11.7%	12.9%	13.9%	13.8%	15.0%	15.0%
Mortality Rate (CHF)	10.6%	11.0%	12.5%	12.9%	11.7%	13.6%	13.2%	13.0%	11.5%	10.2%
Mortality Rate (Pneumonia)	15.3%	14.7%	17.6%	15.6%	13.7%	15.7%	19.0%	18.0%	16.0%	17.5%
Mortality Rate (COPD)	6.9%	8.6%	7.1%	8.3%	7.2%	9.6%	8.7%	9.6%	7.7%	7.9%
All Cause Hospital-Wide Readmission Rate	14.7%	14.8%	14.8%	15.2%	16.0%	15.9%	15.0%	15.0%	16.0%	15.1%
Readmission Rate (AMI)	0.0%	0.0%	0.0%	13.2%	11.7%	12.9%	13.9%	13.8%	15.0%	15.0%
Readmission Rate (CHF)	10.6%	11.0%	12.5%	12.9%	11.7%	13.6%	13.2%	13.0%	11.5%	10.2%
Readmission Rate (Pneumonia)	15.3%	14.7%	17.6%	15.6%	13.7%	15.7%	19.0%	18.0%	16.0%	17.5%
Readmission Rate (COPD)	6.9%	8.6%	7.1%	8.3%	7.2%	9.6%	8.7%	9.6%	7.7%	7.9%

Note: Data is reported by provider number and may include multi-campus hospitals reporting under a single provider number, N/A = Not Applicable

Source: 1. Best Care Report 2. Definitive Healthcare

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## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Quality & Satisfaction ► Awards and Recognition of Top Five Largest Community Hospitals\* – Detroit-Michigan Area

Commercial Hospital Name	Beaumont Hospital – Royal Oak	Henry Ford Hospital	Beaumont Hospital – Dearborn	Ascension Providence Hospital – Southfield Campus	Ascension St. John Hospital
Location	Royal Oak, MI	Detroit, MI	Dearborn, MI	Southfield, MI	Detroit, MI
High Performing Ranked Specialties/Programs	<ul style="list-style-type: none"> <li>Cardiology &amp; Heart Surgery</li> <li>Diabetes &amp; Endocrinology</li> <li>Gastroenterology &amp; GI Surgery</li> <li>Geriatrics</li> <li>Nephrology</li> <li>Neurology &amp; Neurosurgery</li> <li>Orthopedics</li> <li>Pulmonology &amp; Lung Surgery</li> <li>Urology</li> </ul>	<ul style="list-style-type: none"> <li>Cancer</li> <li>Ear, Nose, Throat</li> <li>Gastroenterology &amp; GI Surgery</li> <li>Geriatrics</li> <li>Nephrology</li> <li>Neurology &amp; Neurosurgery</li> <li>Orthopedics</li> <li>Urology</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Gastroenterology &amp; GI Surgery</li> <li>Orthopedics</li> <li>Pulmonology &amp; Lung Surgery</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
High Performing Procedures/Conditions	<ul style="list-style-type: none"> <li>Aortic Value Surgery</li> <li>COPD</li> <li>Colon Cancer Surgery</li> <li>Heart Bypass Surgery</li> <li>Heart Failure</li> <li>Joint Replacement (Hip and Knee)</li> <li>Lung Cancer Surgery</li> </ul>	<ul style="list-style-type: none"> <li>COPD</li> <li>Colon Cancer Surgery</li> <li>Heart Failure</li> </ul>	<ul style="list-style-type: none"> <li>COPD</li> <li>Colon Cancer Surgery</li> <li>Heart Failure</li> </ul>	<ul style="list-style-type: none"> <li>Aortic Value Surgery</li> <li>COPD</li> <li>Colon Cancer Surgery</li> <li>Heart Bypass Surgery</li> <li>Heart Failure</li> <li>Joint Replacement (Hip and Knee)</li> <li>Lung Cancer Surgery</li> </ul>	<ul style="list-style-type: none"> <li>COPD</li> <li>Colon Cancer Surgery</li> <li>Heart Failure</li> <li>Joint Replacement (Hip)</li> </ul>
Notable Awards	<ul style="list-style-type: none"> <li>U.S. News &amp; World Report: Regionally Ranked Hospital #1 in Michigan, #2 in Detroit, Recognized in Southeastern Michigan</li> <li>Becker's Hospital Review: Top 100 Hospitals (2018)</li> <li>American Nurses Credentialing Center (ANCC): Magnet Designation (2018)</li> <li>Healthgrades: America's 100 Best Hospitals (2019, 2018, 2017), America's 250 Best Hospitals (2019, 2018, 2017),</li> <li>Healthgrades: America's 100 Best Hospitals for Cardiac Care Award (2019, 2018, 2017), Cranial Neurosurgery Excellence Award (2019, 2018), Neurosciences Excellence Award (2018)</li> </ul>	<ul style="list-style-type: none"> <li>U.S. News &amp; World Report: Regionally Ranked Hospital #8 in Michigan, #6 in Detroit, Recognized in Southeastern Michigan</li> <li>The Leapfrog Group: Hospital Safety Grade "A" (2019), Top Teaching Hospitals (2018)</li> <li>Becker's Hospital Review: Top 100 Hospitals (2018)</li> </ul>	<ul style="list-style-type: none"> <li>U.S. News &amp; World Report: Regionally Ranked Hospital #16 in Michigan, #10 in Detroit, Recognized in Southeastern Michigan</li> </ul>	<ul style="list-style-type: none"> <li>U.S. News &amp; World Report: Regionally Ranked Hospital #6 in Michigan, #5 in Detroit, Recognized in Southeastern Michigan</li> <li>Healthgrades: America's 50 Best Hospitals (2019, 2018, 2017), America's 250 Best Hospitals (2019, 2018, 2017), America's 50 Best Hospitals for Cardiac Surgery Award (2019, 2018), America's 100 Best Hospitals for Cardiac Care Award (2019, 2018, 2017)</li> <li>IBM Watson Health: Nation's 100 Top Hospitals - Major Teaching Hospitals (2019)</li> </ul>	<ul style="list-style-type: none"> <li>U.S. News &amp; World Report: Regionally Ranked Hospital #14 in Michigan, #9 in Detroit, Recognized in Southeastern Michigan</li> <li>Healthgrades: Patient Safety Excellence Award (2017)</li> </ul>

\*As measured by total staffed beds. Excludes rehabilitation, psychiatric, and long term care facilities.

Note: N/A for High Performing Ranked Specialties/Programs and High Performing Procedures/Conditions indicates the hospital did not meet criteria or volume thresholds set by US News and World Report to be eligible for a rating/ranking.

N/A in for Notable Awards indicate the hospital did not list any care or service delivery awards website. Reflects information that was available as of July 29th, 2019.

Source: 1. US News and World Report Flagship Hospital Rankings 2. Hospital website

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## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Quality & Satisfaction ▶ Awards and Recognition of Top Five Largest Community Hospitals\* – Saginaw-Michigan Area

Commercial Hospital Name	Covenant Medical Center – Harrison	Hurley Medical Center	Ascension Genesys Hospital	MidMichigan Medical Center – Midland	McLaren Flint
Location	Saginaw, MI	Flint, MI	Grand Blanc, MI	Midland, MI	Flint, MI
High Performing Ranked Specialties/Programs	• N/A	• N/A	• N/A	• N/A	• N/A
High Performing Procedures/Conditions	<ul style="list-style-type: none"> <li>• COPD</li> <li>• Heart Failure</li> </ul>	<ul style="list-style-type: none"> <li>• COPD</li> <li>• Heart Failure</li> </ul>	<ul style="list-style-type: none"> <li>• COPD</li> <li>• Heart Failure</li> </ul>	<ul style="list-style-type: none"> <li>• COPD</li> <li>• Heart Failure</li> <li>• Joint Replacement (Hip)</li> </ul>	<ul style="list-style-type: none"> <li>• COPD</li> <li>• Heart Failure</li> <li>• Joint Replacement (Knee)</li> </ul>
Notable Awards	<ul style="list-style-type: none"> <li>• The Leapfrog Group: Hospital Safety Grade "A" (2019)</li> </ul>	• N/A	<ul style="list-style-type: none"> <li>• Healthgrades: America's 100 Best Hospitals for Pulmonary Care (2019)</li> <li>• The Leapfrog Group: Hospital Safety Grade "A" (2019)</li> </ul>	<ul style="list-style-type: none"> <li>• U.S. News &amp; World Report: Regionally Ranked Hospital #16 in Michigan and Recognized in Southeastern Michigan</li> <li>• Healthgrades: America's 100 Best Hospitals for Cardiac Care Award (2017)</li> </ul>	<ul style="list-style-type: none"> <li>• U.S. News &amp; World Report: Regionally Ranked Hospital #20 in Michigan, #12 in Detroit, and Recognized in Southeastern Michigan</li> </ul>

\*As measured by total staffed beds. Excludes rehabilitation, psychiatric, and long term care facilities.

Note: N/A for High Performing Ranked Specialties/Programs and High Performing Procedures/Conditions indicates the hospital did not meet criteria or volume thresholds set by US News and World Report to be eligible for a rating/ranking.

N/A in for Notable Awards indicate the hospital did not list any care or service delivery awards website. Reflects information that was available as of July 29th, 2019.

Source: 1. US News and World Report Flagship Hospital Rankings 2. Hospital website

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## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► Quality of Top Community Hospital Outpatient Services

### Hospital Outpatient Quality Reporting Program Overview

- The Hospital Outpatient Quality Reporting Program (Hospital OQR) is a pay for quality data reporting program implemented by the Centers for Medicare & Medicaid Services (CMS) for outpatient hospital services
  - ✓ Mandated by the Tax Relief and Health Care Act of 2006 by the Centers for Medicare & Medicaid Services to promote higher quality and more efficient health care for Medicare beneficiaries through measurement
- Subsection (d) hospitals that meet Hospital OQR Program requirements during a given calendar year receive a full OPPS payment update, also called the Outpatient Department (OPD) fee schedule increase factor, for the upcoming calendar year
- Eligible hospitals that do not participate or participate but fail to meet program requirements receive a two percentage point reduction of their annual payment update (APU) for the applicable payment year
- Hospitals must submit data for 26 quality measures:
  - ✓ 5 Cardiac Care Measures
  - ✓ 3 ED-Throughput Measures
  - ✓ 1 Pain Management Measures
  - ✓ 6 Imaging Efficiency Measures
  - ✓ 1 Stroke Measures
  - ✓ 9 Submitted Via a Web-Based Tool Measures
  - ✓ 1 Outcome Claims-Based Measures
  - ✓ Commercial Market Data & Analysis

For more information, including measure specifications and minimum case count requirements, see [CMS.gov](https://www.cms.gov)



## VISN 10: Eastern Michigan Market

## Quality & Satisfaction ► Quality of Top Community Hospital Outpatient Services, cont.

•In order to better compare outpatient quality between hospitals, the 21 outpatient quality measure were grouped into broader categories

•National outpatient data was also grouped following the same methodology and used as a benchmark comparison

Hospital Outpatient Quality Reporting Groupings			
Acute Myocardial Infarction / Chest Pain Measure Score	<ul style="list-style-type: none"> <li>OP-2: Fibrinolytic Therapy Received Within 30 Minutes of ED arrival (%)</li> <li>OP-3: Median Time to Transfer to Another Facility for Acute Coronary Intervention (mins)</li> <li>OP-5: Median Time to ECG (mins)</li> </ul>	ED - Throughput	<ul style="list-style-type: none"> <li>OP-18: Median Time from ED Arrival to ED Departure for Discharged ED Patients (mins)</li> <li>OP-22: Left Without Being Seen (%)</li> </ul>
		ED - Volume*	<ul style="list-style-type: none"> <li>EDV - Emergency Department Volume</li> </ul>
Structural (Submitted Via a Web-based Tool)	<ul style="list-style-type: none"> <li>OP-12: The Ability for Providers with HIT to Receive Laboratory Data Electronically Directly into their ONC-Certified EHR System as Discrete Searchable Data (Y/N)</li> <li>OP-17: Tracking Clinical Results between Visits (Y/N)</li> <li>OP-29: Appropriate Follow-up Interval for Normal Colonoscopy in Average Risk Patients (%)</li> <li>OP-30: Colonoscopy Interval for Patients with a History of Adenomatous Polyps – Avoidance of Inappropriate Use (%)</li> <li>OP-31: Cataracts – Improvement in Patient's Visual Function within 90 days Following Cataract Surgery (survey)</li> <li>OP-33 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy</li> </ul>	Imaging Efficiency	<ul style="list-style-type: none"> <li>OP-8: MRI Lumbar Spine for Low Back Pain (%)</li> <li>OP-9: Mammography Follow-up Rates (%)</li> <li>OP-10: Abdomen CT-Use of Contrast Material (%)</li> <li>OP-11: Thorax CT-Use of Contrast Material (%)</li> <li>OP-13: Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac Low Risk Surgery (%)</li> <li>OP-14: Simultaneous Use of Brain Computed Tomography (CT) and Sinus Computed Tomography (CT) (%)</li> </ul>
Outcome Claims-Based	<ul style="list-style-type: none"> <li>OP-32 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy</li> <li>OP-35: Admissions and Emergency Department (ED) Visits for Patients Receiving Outpatient Chemotherapy**</li> <li>OP-36: Hospital Visits after Hospital Outpatient Surgery**</li> </ul>	Stroke	<ul style="list-style-type: none"> <li>OP-23: Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients who Received Head CT or MRI Scan Interpretation Within 45 minutes of ED Arrival (%)</li> </ul>

This analysis is subjective in nature and is only meant to provide a directional opinion as to the current state of VA and non-VA providers in the market.

\*ED volume (EDV) is not a Hospital OQR measure, but OP-18 and OP-22 national data are based on ED volumes.

\*\*The first reporting period for OP-35 and -36 began January 1, 2018 and goes through December 31, 2018, for the CY 2020 payment determination. Data for these 2 measures have not made available by CMS and are not included in this analysis.



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Quality &amp; Satisfaction ► Key Quality Metrics of Top Five Largest Community Hospitals\* – Detroit-Michigan Area

Outpatient Quality Category	Measure Name	Preferred Direction	Beaumont Hospital - Royal Oak	Henry Ford Hospital	Beaumont Hospital - Dearborn	Ascension Providence Hospital - Southfield Campus	Ascension St John Hospital	National Rate
AMI / Chest Pain	OP-2: Fibrinolytic Therapy Received Within 30 Minutes of ED arrival (%)	High	N/A	N/A	N/A	N/A	N/A	59.0%
	OP-3: Median Time to Transfer to Another Facility for Acute Coronary Intervention (mins)	Low	N/A	N/A	N/A	N/A	N/A	62
	OP-5: Median Time to ECG (mins)	Low	N/A	8	N/A	10	5	8
	OP-12: Receive Laboratory Data Electronically Directly as Discrete Searchable Data (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Structural (Submitted Via a Web-Based Tool)	OP-17: Tracking Clinical Results between Visits (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	N/A
	OP-29: Appropriate Follow-up Interval for Normal Colonoscopy in Average Risk Patients (%)	High	100.0%	93.0%	84.0%	96.0%	85.0%	88.0%
	OP-30: Colonoscopy Interval for Patients with a History of Adenomatous Polyps ?	High	98.0%	94.0%	75.0%	99.0%	100.0%	90.0%
	Avoidance of Inappropriate Use (%)	High	N/A	N/A	N/A	N/A	N/A	95
Outcome Claims-Based	OP-31: Cataracts ? Improvement in Patient?s Visual Function within 90 days Following Cataract Surgery (survey)	High	N/A	N/A	N/A	N/A	N/A	95
	OP-33: External Beam Radiotherapy for Bone Metastases (%)	High	86.0%	79.0%	98.0%	N/A	100.0%	86.0%
	OP-32: Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy	Low	14.0%	15.3%	15.1%	14.9%	14.9%	14.8%
	ED – Throughput	Low	225	167	247	173	196	137
ED – Volume	OP-22: Left Without Being Seen (%)	Low	1.0%	4.0%	2.0%	1.0%	3.0%	2.0%
	EDV: Emergency Department Volume	N/A	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	N/A
Imaging Efficiency	OP-8: MRI Lumbar Spine for Low Back Pain (%)	Low	31.6%	35.6%	41.3%	35.5%	31.9%	39.3%
	OP-9: Mammography Follow-up Rates (%)	Low	15.6%	8.8%	6.5%	6.1%	5.0%	8.9%
	OP-10: Abdomen CT-Use of Contrast Material (%)	Low	6.4%	4.9%	10.2%	7.2%	10.7%	7.8%
	OP-11: Thorax CT-Use of Contrast Material (%)	Low	1.5%	4.6%	10.0%	1.8%	2.1%	1.5%
	OP-13: Cardiac Imaging for Preoperative Risk Assessment for Non Cardiac Low Risk Surgery (%)	Low	4.5%	4.9%	6.4%	4.7%	4.2%	4.6%
	OP-14: Simultaneous Use of Brain Computed Tomography (CT) and Sinus Computed Tomography (CT) (%)	Low	1.6%	0.4%	0.9%	0.5%	1.8%	1.1%
	OP-23: Head CT or MRI Scan Results Within 45 minutes of ED Arrival (%)	High	N/A	53.0%	N/A	N/A	N/A	73.0%
	OP-23: Head CT or MRI Scan Results Within 45 minutes of ED Arrival (%)	High	N/A	53.0%	N/A	N/A	N/A	73.0%

\*As measured by total staffed beds \*\*A rate of 8% - 14% is typically ideal for mammography follow-up rates N/A = Not available/reported Green: at/above National Rate



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Quality &amp; Satisfaction ► Key Quality Metrics of Top Five Largest Community Hospitals\* – Saginaw-Michigan Area

Outpatient Quality Category	Measure Name	Preferred Direction	Covenant Medical Center - Harrison	Hurley Medical Center	Ascension Genesys Hospital	MidMichigan Medical Center - Midland	McLaren Flint	National Rate
AMI / Chest Pain	OP-2: Fibrinolytic Therapy Received Within 30 Minutes of ED arrival (%)	High	N/A	N/A	N/A	N/A	N/A	59.0%
	OP-3: Median Time to Transfer to Another Facility for Acute Coronary Intervention (mins)	Low	N/A	N/A	N/A	N/A	N/A	62
	OP-5: Median Time to ECG (mins)	Low	24	N/A	N/A	N/A	N/A	8
Structural (Submitted Via a Web-Based Tool)	OP-12: Receive Laboratory Data Electronically Directly as Discrete Searchable Data (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	N/A
	OP-17: Tracking Clinical Results between Visits (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	N/A
	OP-29: Appropriate Follow-up Interval for Normal Colonoscopy in Average Risk Patients (%)	High	97.0%	96.0%	86.0%	95.0%	95.0%	88.0%
	OP-30: Colonoscopy Interval for Patients with a History of Adenomatous Polyps ?	High	100.0%	87.0%	35.0%	94.0%	71.0%	90.0%
	Avoidance of Inappropriate Use (%)							
	OP-31: Cataracts ? Improvement in Patient's Visual Function within 90 days Following Cataract Surgery (survey)	High	N/A	N/A	N/A	N/A	N/A	95
Outcome Claims-Based	OP-33: External Beam Radiotherapy for Bone Metastases (%)	High	N/A	N/A	N/A	38.0%	87.0%	86.0%
	OP-32: Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy	Low	14.9%	15.7%	17.8%	16.1%	14.5%	14.8%
	ED – Throughput							
ED – Volume	OP-18: Median Time from ED Arrival to ED Departure for Discharged ED Patients (mins)	Low	167	275	176	154	151	137
	OP-22: Left Without Being Seen (%)	Low	2.0%	6.0%	1.0%	0.0%	3.0%	2.0%
	EDV: Emergency Department Volume	N/A	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	High (40,000-59,999 patients annually)	Very High (60,000+ patients annually)	N/A
Imaging Efficiency	OP-8: MRI Lumbar Spine for Low Back Pain (%)	Low	30.3%	N/A	35.9%	33.1%	41.6%	39.3%
	OP-9: Mammography Follow-up Rates (%)	Low	6.0%	10.8%	N/A	6.8%	5.0%	8.9%
	OP-10: Abdomen CT-Use of Contrast Material (%)	Low	14.2%	1.0%	1.3%	5.2%	20.4%	7.8%
	OP-11: Thorax CT-Use of Contrast Material (%)	Low	7.7%	0.3%	1.1%	2.9%	0.5%	1.5%
	OP-13: Cardiac Imaging for Preoperative Risk Assessment for Non Cardiac Low Risk Surgery (%)	Low	4.0%	N/A	6.1%	4.1%	3.7%	4.6%
	OP-14: Simultaneous Use of Brain Computed Tomography (CT) and Sinus Computed Tomography (CT) (%)	Low	1.2%	0.8%	0.2%	0.8%	1.3%	1.1%
	OP-23: Head CT or MRI Scan Results Within 45 minutes of ED Arrival (%)	High	82.0%	N/A	N/A	62.0%	N/A	73.0%

\*As measured by total staffed beds \*\*A rate of 8% - 14% is typically ideal for mammography follow-up rates N/A = Not available/reported Green: at/above National Rate



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Quality &amp; Satisfaction

## Outpatient Procedure Volumes of Top Five Largest Community Hospitals\* – Detroit-Michigan Area

Outpatient Quality Category	Procedure Type	Beaumont Hospital - Royal Oak	Henry Ford Hospital	Beaumont Hospital - Dearborn	Ascension Providence Hospital - Southfield Campus	Ascension St John Hospital
OP Surgical Procedure Volume	Gastrointestinal	11,329	18,430	2,615	4,250	3,260
	Eye	1,591	5,400	3	727	959
	Nervous System	471	992	93	298	292
	Musculoskeletal	4,273	1,418	205	776	1,181
	Skin	7,749	40,388	796	4,018	632
	Genitourinary	3,692	4,955	1,456	1,386	845
	Cardiovascular	3,635	3,215	2,206	173	95
	Respiratory	885	8,545	306	158	159
	Other	771	439	73	8	0
	Total	34,396	83,782	7,753	11,794	7,423

- Most hospital outpatient procedures (99%) fall into one of eight categories: Cardiovascular, Eye, Gastrointestinal, Genitourinary, Musculoskeletal, Nervous System, Skin, and Other (CMS.gov; green: at/above National Rate)
- Research has suggested higher procedure volumes are associated with lower costs and better quality (Advisory Board).

N/A = Not available/reported

\*As measured by total staffed beds





## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Quality & Satisfaction ► Outpatient Procedure Volumes of Top Five Largest Community Hospitals\* – Saginaw-Michigan Area

Outpatient Quality Category	Procedure Type	Covenant Medical Center - Harrison	Hurley Medical Center	Ascension Genesys Hospital	MidMichigan Medical Center - Midland	McLaren Flint
OP Surgical Procedure Volume	Gastrointestinal	6,688	8,339	3,605	1,526	3,915
	Eye	186	73	94	142	250
	Nervous System	191	430	132	137	135
	Musculoskeletal	629	377	1,145	605	587
	Skin	1,532	316	1,030	4,335	5,479
	Genitourinary	1,096	1,565	949	1,293	1,007
	Cardiovascular	2,077	1,425	264	1,047	1,845
	Respiratory	133	19	221	89	144
	Other	279	82	245	114	150
	Total	12,811	12,626	7,685	9,288	13,512

- Most hospital outpatient procedures (99%) fall into one of eight categories: Cardiovascular, Eye, Gastrointestinal, Genitourinary, Musculoskeletal, Nervous System, Skin, and Other (CMS.gov; green: at/above National Rate)
- Research has suggested higher procedure volumes are associated with lower costs and better quality (Advisory Board).

N/A = Not available/reported

\*As measured by total staffed beds



## Facilities



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Inpatient Campus Snapshot

**Facility Name:** Detroit-Michigan

Facility Complexity Level (2017): High-1C

FY18 Core Facility Uniques (VAMC only): 48,578

**REAL PROPERTY OVERVIEW**

Acres available	0
Main Patient Care Facility Construction Date	1996
Most Recent Renovation Date (Main Hospital Building)	N/A
BGSF (campus total)	1,234,600 sq. ft
DGSF (direct patient care)	537,365 sq. ft 44.0% of BGSF
Property Size	17 acres 0 acres available**
Annual Operations and Maintenance Cost	\$14,913,968
Total 10-Year Capital Investment*	\$99,279,468
Facilities Conditions Assessment Deficiencies	\$101,022,159 \$2,080/Unique
Seismic Risk	Low Risk
Operational Leases	5 Leases \$919,245 total annual cost 39,635 total NUSF

\* Sum of Major and Minor Con. and NRM spending

\*\* Provides an indication of any excess or surplus land, not currently in use and with no plans for future expansion needs that could be used for future development.



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Inpatient Campus and Outpatient Care Locations

Inpatient  
Campus:

Facility Data - Detroit			
Building Gross Sq. Ft. (campus total)	Annual Operations and Maintenance Cost (per sq. ft.)	Operating Beds (Reported by Field)	
		Acute Beds <sup>1</sup>	Other Beds <sup>2</sup>
1,234,600	\$12.08	134	131

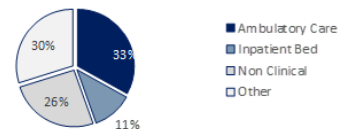
Outpatient  
Care  
Locations:

Facility Name <sup>3</sup>	Ambulatory Care SF
John D. Dingell Department of Veterans Affairs Medical Center	409,067
Pontiac CBOC	8,275
Piquette Square Mental Health Development	3,781

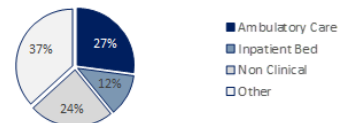
Facility  
Metrics:

	Detroit	VISN Average	VHA Average
Campus SF	1,234,600	967,393	828,121
Core Facility Uniques	48,578	40,042	36,243
Campus SF/Core Facility Uniques	25	24	23
Current FCA Backlog	\$101,022,159	\$75,768,821	\$123,141,990
FCA Backlog/Core Facility Uniques	\$2,080	\$1,892	\$3,398

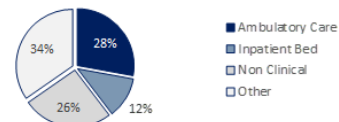
Detroit Space Distribution



VISN 10 Space Distribution



VHA Space Distribution



1. Includes Acute Psych, Medicine, and Surgical Beds

2. Includes Spinal Cord, Blind Rehab, CLC, DRRTP, and Intermediate Beds

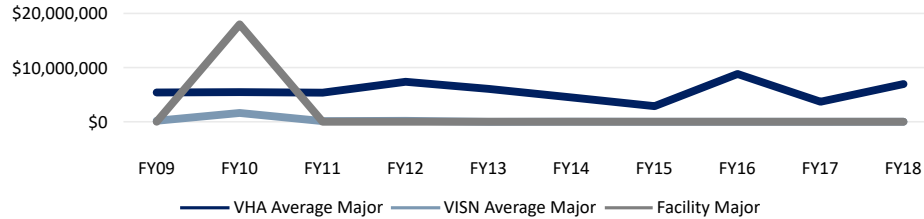
3. Only reflects SF related to VA owned and leased fixed facilities



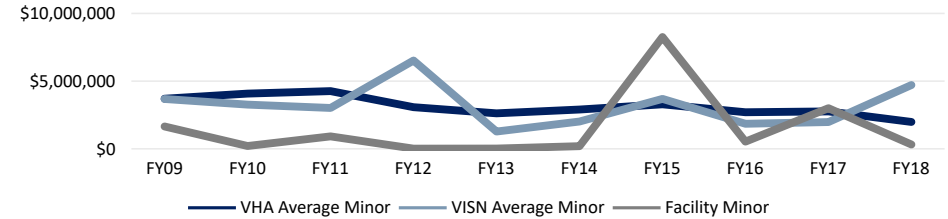
## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Investment – Detroit-Michigan

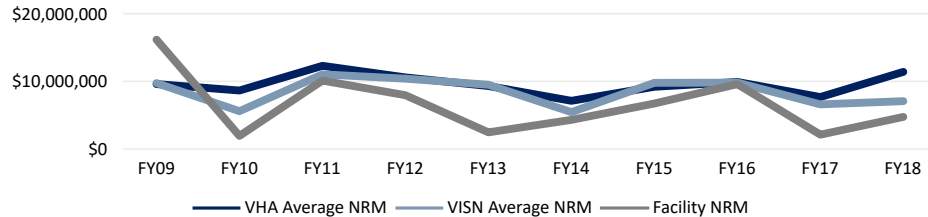
Major Construction Funding



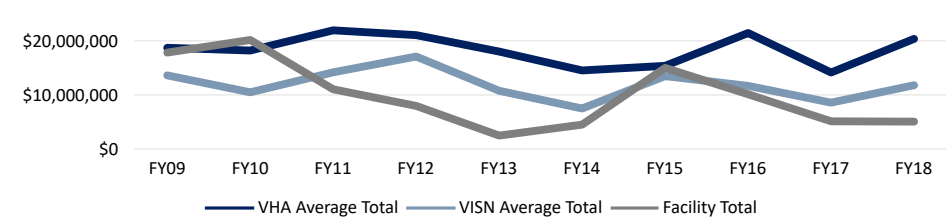
Minor Construction Funding



NRM Funding



Total Construction Funding



	Facility	VISN Average	VHA Average
FCA Backlog/SF**	\$82	\$86	\$139
Current FCA Backlog	\$101,022,159	\$75,768,821	\$123,886,618
Investment/SF**	\$80	\$123	\$155
Total 10-Year Capital Investment*	\$99,279,468	\$119,117,944	\$137,521,745
Owned SF	1,234,600	968,419	886,486

\*Sum of Major and Minor Con. and NRM spending \*\*Total 10-Year Capital Investment and Current FCA Backlog Divided by Owned SF

Source: CAI Buildings and FCA Red Green Reports 9-7-2019; FMS 830 837, Accounts 110, 111, and 162 (Cost Center 8542, BOC 32XX, (less BOC 3222 and BOC 3224))

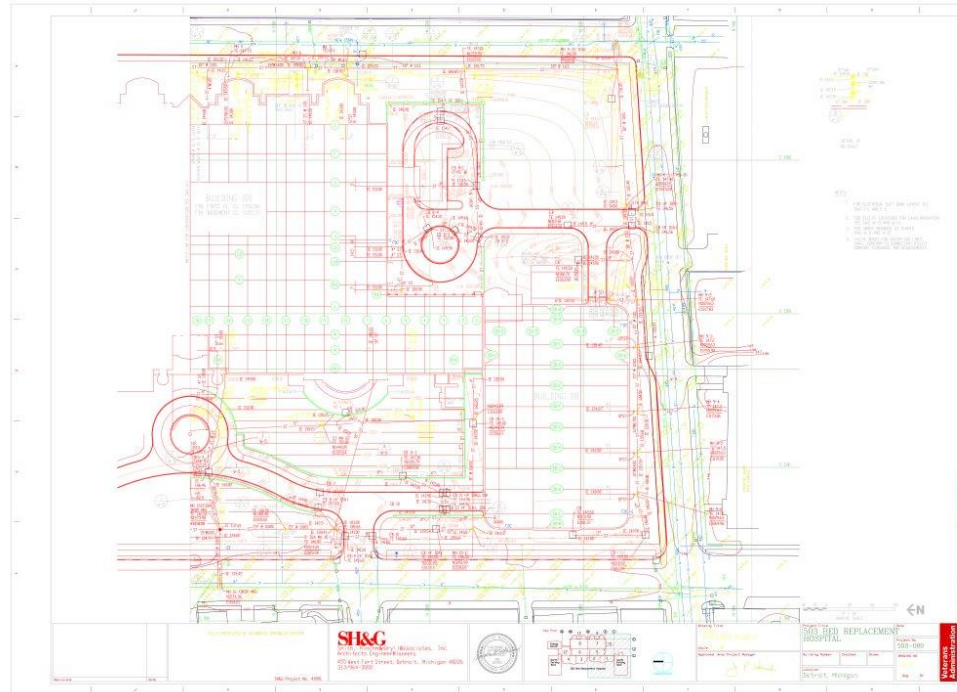
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## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Site Plan

## Detroit-Michigan





## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Building Inventory (Owned)

Detroit-Michigan												
Function Title	Current Use	Year Built	Building Gross Sq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Cost of FCA Deficiencies*	Full Replacement Cost	Historical Status	Seismic Risk
Total			1,234,600	409,067	128,298	317,677	362,162	17,396	\$87,691,143	\$956,562,535		
Medical Center (100)	Hospital	1996	1,189,200	409,067	128,298	272,277	362,162	17,396	\$84,941,967	\$924,405,942	Not Historic	Exempt
Energy Center (103)	Industrial	1996	45,400	0	0	45,400	0	0	\$2,749,176	\$32,156,593	Not Historic	Exempt

\*Project Costs to remediate FCAs vary significantly, from below assessed value to more than 3 times the value \*\*“Non-Contributing” is a non-contributing element of a landmark or listed district



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Building Inventory (Leased)

Detroit-Michigan											
Function Title	Current Use	Year Built	Building GrossSq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Lease Termination (Hard)	Year of Activation	Annual Rent
Total			39,635	12,056	17,864	9,000	715	0			\$919,245
Detroit Homeless Domiciliary Res. Rehab	Mental Health	1950	17,864	0	17,864	0	0	0	Saturday, December 10, 2016	2006	\$475,398
Detroit Warehouse II	Warehouse	1910	9,000	0	0	9,000	0	0	Monday, August 14, 2028	2018	\$9,506
Pontiac CBOC	CBOC	1995	8,990	8,275	0	0	715	0	Tuesday, December 15, 2020	2010	\$200,342
Piquette Square Mental Health Development	Mental Health	2000	3,781	3,781	0	0	0	0	Saturday, July 31, 2021	2011	\$87,741
Detroit Off-Site Parking	Parking		0	0	0	0	0	0	Thursday, September 30, 2021	2016	\$146,258





## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Summary of Architectural and Engineering Challenges – Detroit-Michigan

Infrastructure Category	Major Challenges – Detroit
Site Utilities	<ul style="list-style-type: none"><li>• Aging Sewer Pump Stations require replacement</li><li>• Storm sewer manholes are failing and need to be re-built</li></ul>
Parking	<ul style="list-style-type: none"><li>• Overcrowded parking. Short 200 spaces.</li></ul>
Architecture	<ul style="list-style-type: none"><li>• Exterior walls require better insulation</li></ul>
Electrical	<ul style="list-style-type: none"><li>• See FCA (Replacing Main Switchgear, Transformers, UPS systems)</li></ul>
Plumbing	<ul style="list-style-type: none"><li>• Mixing Valves need to be installed (25% complete).</li><li>• Also need to address hot water distribution.</li></ul>
HVAC	<ul style="list-style-type: none"><li>• See FCA (Replacing 11 Air Handlers, Replacing Condensate Return System...)</li></ul>
Medical Gases	<ul style="list-style-type: none"><li>• See annual med gas inspection report.</li></ul>
Clinical Program Adjacencies	<ul style="list-style-type: none"><li>• None noted</li></ul>
Other Program Adjacencies	<ul style="list-style-type: none"><li>• None noted</li></ul>
Other	<ul style="list-style-type: none"><li>• None noted</li></ul>



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Active and Planned Projects — Detroit-Michigan

	Project	SF/ Count	Status	Estimated Cost
Active Minor Construction <sup>1</sup> Active NRMs <sup>1</sup>	Detroit Fisher House (553-305)	80,000	Construction Awarded 02/21/19	\$894,000
	Addition of Second Linear Accelerator Vault (553-CSI-004)	1,150	Construction Awarded 07/31/17	\$1,910,000
	Clean Airflow Station as all Air Handling Units (553-21-212)	1,200	Planned	\$265,000
	Domiciliary Lease Buildout and Lease (23NR9KA01) (553-16-108)	32,000	Construction Awarded 08/01/19	\$7,513,700
	Emergency Concrete Repairs at Red Entrance (553-19-502)	430	Planned	\$23,000
	Install Anti-Ligature Alarms at B2North Doors (553-19-201)	10,000	Planned	\$275,000
	Install Electrical Switchgear Enclosures (23NR8KA06) (553-16-101)	2,500	Design Awarded 07/13/18	\$6,700,000
	Installation of Anti Climb Fencing at Two Parking Structures (23NR6LA22) (553-17-101)		Design Awarded 09/25/18	\$2,875,000
	Installation of Simulation Lab for Education (553-16-104)	1,600	Design Awarded 03/31/16	\$500,000
	Installation of Utilities for Mobile Boiler Unit (553-12-122)	10,000	Construction Awarded 07/18/19	\$330,000
	Relocate Controls for Sewer Pump Station No. 3 (553-21-204)	1,000	Planned	\$96,000
	Renovate A4South for Outpatient Care (23NR5LA14) (553-15-103)	11,000	Construction Awarded 08/31/18	\$4,400,000
	Renovate B2South for Inpatient Mental Health (23NR9KA05) (553-19-102)	19,500	Planned	\$5,000,000
	Renovate Dental Suite for new Delivery Systems (553-18-203)	11,000	Design Awarded 04/17/19	\$880,000
	Renovate Exterior Signage (553-15-106)	2,000	Construction Awarded 09/17/18	\$171,000
	Renovate First Floor Mental Health for Outpatient Care (23NR5LA40) (553-13-122)	20,000	Construction Awarded 04/14/16	\$990,000
	Renovate First Floor Restrooms (553-21-203)	6,000	Planned	\$690,000
	Renovate Nuclear Medicine Waiting Area (553-21-210)	800	Planned	\$535,000
	Renovate SPS for Centralized Scope Reprocessing (553-19-105)	8,000	Planned	\$5,938,000
	Renovate Surface Parking Lot (553-20-230)	13,750	Construction Awarded 04/24/19	\$350,000
	Renovate Urgent Care and Registration Areas (23NR9KA07) (553-19-104)	7,500	Design Awarded 04/03/19	\$5,790,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

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## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Active and Planned Projects — Detroit-Michigan, cont.

	Project	SF/ Count	Status	Estimated Cost
Active NRMs <sup>1</sup>	Renovations for USP 800 Requirements (553-20-204)	1,500	Planned	\$450,000
	Replace Boiler Burner Control System and other Components (23NR9KA06) (553-19-103)	2,600	Design Awarded 08/07/19	\$3,300,000
	Replace Concrete and Waterproofing at Red Entrance (553-21-201)	17,000	Planned	\$957,000
	Replace Condensate Return Pump System (553-18-201)	30,000	Design Awarded 09/26/18	\$910,000
	Replace Damaged Steam Coils and Cooling Coil at AHU (553-20-205)	1,000	Planned	\$292,000
	Replace Dampers and Actuators at 72 Air Handling Units (553-20-202)	70,000	Planned	\$954,000
	Replace Elevators at Building 100 Medical Center (553-20-101)	11,000	Planned	\$7,208,000
	Replace Medical Center Steam Station (553-21-205)	3,000	Planned	\$540,000
	Replace Parking Structure Elevators (23NR9KA04) (553-19-101)	6,000	Planned	\$9,600,000
	Replace Sinks and Counters at In-Patient Rooms (553-21-202)	5,000	Planned	\$680,000
	Replace Yellow and Red Entrances at VA Detroit Medical Center (553-21-206)	2,460	Planned	\$935,000
	Replacement of 11 Air Handling Units (553-20-102)	11,000	Planned	\$5,618,000
	Site Prep for Angio Imaging Equipment C3681 (553-CSI-012)	450	Construction Awarded 06/14/19	\$225,000
	Site Prep for C1691 DR X-Ray Replacement (553-CSI-011)	450	Construction Awarded 06/14/19	\$300,000
	Site Prep for Digital Radiography Equipment C3617 (553-CSI-014)	350	Construction Awarded 06/14/19	\$110,000
	Site Prep for Fluoroscopy Room C3611 (553-CSI-015)	350	Construction Awarded 06/14/19	\$130,000
	Site Prep for Fluoro Imaging Equipment C3622 (553-CSI-013)	350	Construction Awarded 06/14/19	\$130,000
	Site Prep for Large Bore MRI (553-CSI-009)	980	Construction Awarded 06/14/19	\$752,000
	Site Prep for PET/MRI Imaging Equipment (553-CSI-006)	1,200	Design Awarded 03/04/19	\$1,680,000
	Site Prep for Urology Imaging Equipment (553-CSI-007)	670	Planned	\$138,000
	Site Prep to Install First Floor CT Scanner (553-CSI-010)	853	Construction Awarded 06/14/19	\$515,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

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## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Facilities ► Active and Planned Projects — Detroit-Michigan, cont.

	Project	SF/ Count	Status	Estimated Cost
Active NRMs <sup>1</sup>  Active Projects Total Estimated Cost (Major, Minor, NRM) <sup>1</sup> SCIP FY2020 Submitted Projects (10-Year-Plan)	Upgrade Fire Alarm System (23NR9KA03) (553-18-101)	10,000	Planned	\$2,750,000
	Upgrade Nurse Call System (553-20-107)	160,000	Planned	\$3,800,000
	Upgrade Siemens Building Management System (553-21-213)	500	Planned	\$130,000
	Upgrade UPS equipment for OIT Data Closets and Server Rooms (553-20-203)	6,000	Planned	\$477,000
	Active Projects Total Estimated Cost (Major, Minor, NRM)			\$88,706,700
	Green Management Program	1		\$5,300,000
	Major Leases	1		\$17,488,000
	NRM-Infrastructure Modernization	10		\$36,636,000
	NRM-Sustainment	1		\$4,800,000
	Total Estimated Cost SCIP Projects	13		\$64,224,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

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## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Facilities ► Inpatient Campus Snapshot

**Facility Name:** Saginaw-Michigan

Facility Complexity Level (2017):	Low-3
FY18 Core Facility Uniques (VAMC only):	31,369

**REAL PROPERTY OVERVIEW**

Acres available	0
Main Patient Care Facility Construction Date	1950
Most Recent Renovation Date (Main Hospital Building)	1987
BGSF (campus total)	333,849 sq. ft
DGSF (direct patient care)	105,459 sq. ft 32.0% of BGSF
Property Size	17 acres 0 acres available**
Annual Operations and Maintenance Cost	\$5,234,752
Total 10-Year Capital Investment*	\$72,496,628
Facilities Conditions Assessment Deficiencies	\$44,155,945 \$1,407/Unique
Seismic Risk	Low Risk
Operational Leases	14 Leases \$2,965,181 total annual cost 117,005 total NUSF

\* Sum of Major and Minor Con. and NRM spending

\*\* Provides an indication of any excess or surplus land, not currently in use and with no plans for future expansion needs that could be used for future development.



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Facilities ► Inpatient Campus and Outpatient Care Locations

## Inpatient Campus:

Facility Data - Saginaw			
Building Gross Sq. Ft. (campus total)	Annual Operations and Maintenance Cost (per sq. ft.)	Operating Beds (Reported by Field)	
		Acute Beds <sup>1</sup>	Other Beds <sup>2</sup>
333,849	\$15.68	8	81

## Outpatient Care Locations:

Facility Name <sup>3</sup>	Ambulatory Care SF
Aleda E. Lutz Department of Veterans Affairs Medical Center	72,011
Saginaw Health Care Annex	18,703
Gaylord CBOC	5,782
Alpena CBOC	5,755
Bad Axe CBOC	5,130
Cadillac CBOC	4,850
Clare CBOC	4,355
Colonel Delmas T. Crow VA Clinic	3,243
Cheboygan County CBOC	3,133
Grayling CBOC	2,904
Oscoda CBOC	2,853
Grand Traverse Outpatient Clinic	2,320

## Facility Metrics:

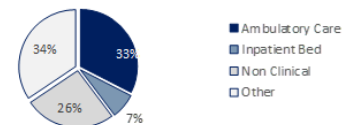
	Saginaw	VISN Average	VHA Average
Campus SF	333,849	967,393	828,121
Core Facility Uniques	31,369	40,042	36,243
Campus SF/Core Facility Uniques	11	24	23
Current FCA Backlog	\$44,155,945	\$75,768,821	\$123,141,990
FCA Backlog/Core Facility Uniques	\$1,408	\$1,892	\$3,398

1. Includes Acute Psych, Medicine, and Surgical Beds

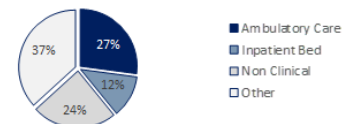
2. Includes Spinal Cord, Blind Rehab, CLC, DRRTP, and Intermediate Beds

3. Only reflects SF related to VA owned and leased fixed facilities

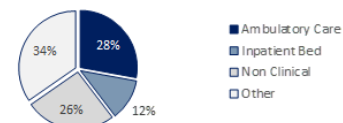
## Saginaw Space Distribution



## VISN 10 Space Distribution



## VHA Space Distribution

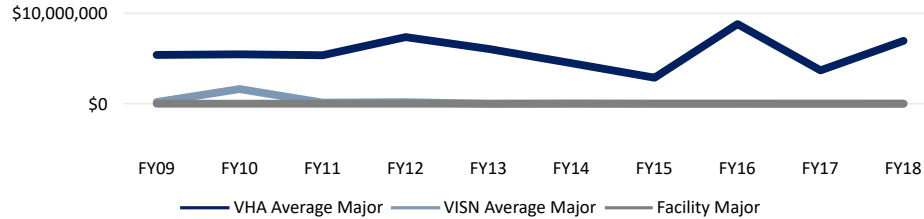




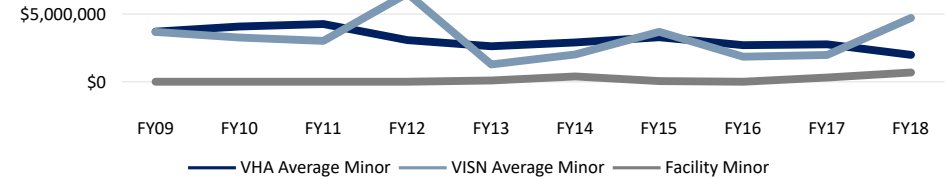
## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Facilities ► Investment – Saginaw-Michigan

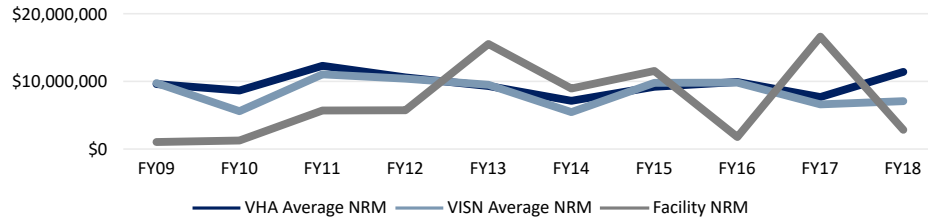
Major Construction Funding



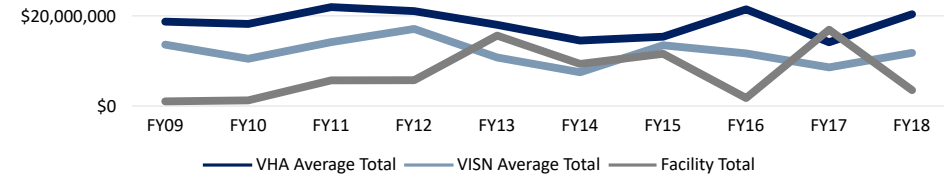
Minor Construction Funding



NRM Funding



Total Construction Funding



	Facility	VISN Average	VHA Average
FCA Backlog/SF**	\$132	\$86	\$139
Current FCA Backlog	\$44,155,945	\$75,768,821	\$123,886,618
Investment/SF**	\$217	\$123	\$155
Total 10-Year Capital Investment*	\$72,496,628	\$119,117,944	\$137,521,745
Owned SF	333,849	968,419	886,486

\*Sum of Major and Minor Con. and NRM spending \*\*Total 10-Year Capital Investment and Current FCA Backlog Divided by Owned SF

Source: CAI Buildings and FCA Red Green Reports 9-7-2019; FMS 830 837, Accounts 110, 111, and 162 (Cost Center 8542, BOC 32XX, (less BOC 3222 and BOC 3224))

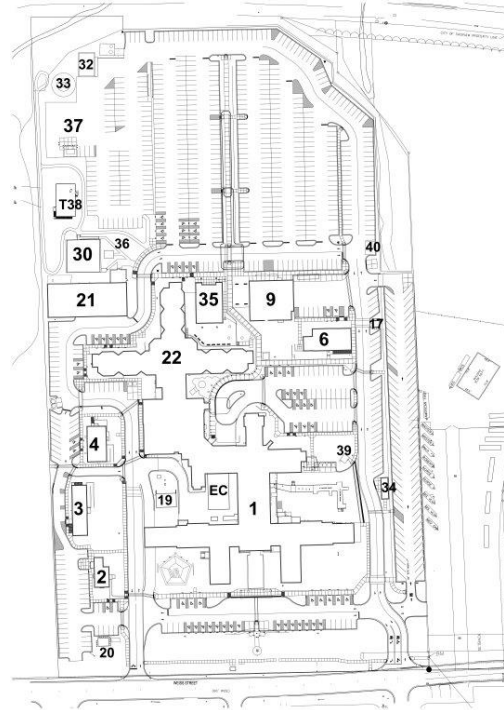
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VISN 10: Eastern Michigan Market — Saginaw-Michigan

Facilities ► Site Plan

Saginaw-Michigan







## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Facilities ► Building Inventory (Owned)

Saginaw-Michigan												
Function Title	Current Use	Year Built	Building Gross Sq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Cost of FCA Deficiencies*	Full Replacement Cost	Historical Status	Seismic Risk
<b>Total</b>			<b>333,849</b>	<b>72,011</b>	<b>33,448</b>	<b>106,929</b>	<b>113,814</b>	<b>7,647</b>	<b>\$37,611,391</b>	<b>\$225,368,680</b>		
Hospital (1)	Hospital	1950	195,386	59,983	0	54,799	73,335	7,269	\$25,547,363	\$136,274,875	Not Historic	Exempt
Community Living Center (22)	Hospital	1992	86,545	10,739	33,448	14,216	28,142	0	\$6,382,551	\$55,387,548	Not Historic	Exempt
Vehicle Garage (21)	Industrial	1949	9,841	0	0	7,958	1,883	0	\$97,841	\$6,435,175	Not Historic	Exempt
Director's Suite (3)	Office	1949	7,812	724	0	3,993	3,095	0	\$2,255,314	\$5,077,728	Not Historic	Exempt
Human Resources (6)	Office	1949	7,157	312	0	4,713	2,132	0	\$0	\$4,641,349	Not Historic	Exempt
Warehouse (9)	Warehouses	1950	6,883	0	0	5,994	889	0	\$325,890	\$4,454,574	Not Historic	Exempt
Healthcare Administration Services (4)	Office	1949	4,752	0	0	4,044	708	0	\$1,749,182	\$3,075,423	Not Historic	Exempt
Pavilion (35)	Service	2017	3,689	0	0	3,689	0	0	\$21,028	\$2,387,465	Not Historic	Not Listed
Administration (30)	Office	1949	3,577	0	0	3,577	0	0	\$68,596	\$2,314,981	Not Historic	Exempt
Police Svcs & Quality Mgt (2)	Office	1950	2,568	0	0	2,568	0	0	\$1,044,320	\$1,661,971	Not Historic	Exempt
Swing Space Building (T38)	Office	2017	2,125	253	0	789	705	378	\$0	\$1,383,382	Not Historic	Not Listed
Pump House (32)	Industrial	1980	1,314	0	0	39	1,275	0	\$918	\$850,401	Not Historic	Exempt
Emergency Generator (19)	Industrial	1980	950	0	0	0	950	0	\$68,919	\$614,826	Not Historic	Exempt
Backflow Preventer Substation (34)	Industrial	2015	550	0	0	550	0	0	\$10,724	\$355,952	Not Historic	Not Listed
Hazardous Waste Storage (18)	Warehouses	1970	520	0	0	0	520	0	\$16,454	\$336,536	Not Historic	Exempt
Gas Meter House (17)	Industrial	1972	180	0	0	0	180	0	\$22,290	\$116,493	Not Historic	Exempt

\*Project Costs to remediate FCAs vary significantly, from below assessed value to more than 3 times the value \*\*\*"Non-Contributing" is a non-contributing element of a landmark or listed district



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Facilities ► Building Inventory (Leased)

Saginaw-Michigan											
Function Title	Current Use	Year Built	Building GrossSq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Lease Termination (Hard)	Year of Activation	Annual Rent
<b>Total</b>			<b>117,005</b>	<b>59,028</b>	<b>0</b>	<b>30,585</b>	<b>24,550</b>	<b>354</b>			<b>\$2,965,181</b>
Saginaw Health Care Annex	CBOC	2010	18,703	18,703	0	0	0	0	Thursday, October 31, 2030	2010	\$519,094
Bad Axe CBOC	CBOC	1970	10,573	5,130	0	2,429	3,014	0	Monday, October 5, 2020	2010	\$177,984
Cadillac CBOC	CBOC	1973	10,197	4,850	0	1,030	4,317	0	Sunday, May 23, 2021	2011	\$198,160
Alpena CBOC	CBOC	2008	9,325	5,755	0	1,853	0	0	Friday, August 31, 2018	2008	\$320,681
Gaylord CBOC	CBOC	1950	9,244	5,782	0	2,691	0	0	Friday, September 14, 2018	2008	\$251,149
Saginaw Administrative Space	Office	1990	9,144	0	0	9,144	0	0	Saturday, October 1, 2033	2018	\$242,316
Clare CBOC	CBOC	2008	8,712	4,355	0	1,180	3,177	0	Wednesday, May 8, 2019	2009	\$274,010
Saginaw Administrative Space	Office	1990	8,088	0	0	8,088	0	0	Friday, August 31, 2018	2008	\$225,626
Oscoda CBOC	CBOC	1984	7,779	2,853	0	884	3,962	80	Saturday, June 20, 2026	2016	\$149,703
Cheboygan County CBOC	CBOC	1955	7,711	3,133	0	1,167	3,137	274	Thursday, September 2, 2021	2011	\$161,084
Colonel Delmas T. Craw VA Clinic	CBOC	1980	7,101	3,243	0	865	2,993	0	Tuesday, December 31, 2019	2002	\$173,040
Grayling CBOC	CBOC	1997	5,615	2,904	0	725	1,986	0	Tuesday, October 18, 2022	2012	\$122,904
Grand Traverse Outpatient Clinic	Mental Health	1985	4,813	2,320	0	529	1,964	0	Thursday, February 11, 2021	2016	\$147,930
Saginaw Parking Lot	Parking		0	0	0	0	0	0	Tuesday, April 1, 2025	2015	\$1,500



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Facilities ► Summary of Architectural and Engineering Challenges – Saginaw-Michigan

Infrastructure Category	Major Challenges – Saginaw
Site Utilities	<ul style="list-style-type: none"> <li>Underground Valves Failing</li> </ul>
Parking	<ul style="list-style-type: none"> <li>Lack of Parking currently, project in place to add parking on new property.</li> </ul>
Architecture	<ul style="list-style-type: none"> <li>Renovating to Place outpatient clinics in old inpatient wards involves</li> </ul>
Electrical	<ul style="list-style-type: none"> <li>In good condition only issues is a lack of secondary electrical feed</li> </ul>
Plumbing	<ul style="list-style-type: none"> <li>Overhead space constraints to fit plumbing</li> <li>Very old Domestic Water, Sanitary and Storm Piping beginning to fail.</li> <li>Backflow preventors need replacement</li> </ul>
HVAC	<ul style="list-style-type: none"> <li>Space constraints, difficult to fit duct work</li> </ul>
Medical Gases	<ul style="list-style-type: none"> <li>No issues</li> </ul>
Clinical Program Adjacencies	<ul style="list-style-type: none"> <li>Sterile processing on different floor than operating rooms</li> <li>Primary Care services located on multiple floors</li> <li>Urgent Care not connected to ambulance bay</li> </ul>
Other Program Adjacencies	<ul style="list-style-type: none"> <li>Logistics not in the main building</li> <li>Loading dock locations in employee/patient flow areas</li> <li>Old living quarters used for admin space</li> </ul>
Other	<ul style="list-style-type: none"> <li>None noted</li> </ul>



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Facilities ► Active and Planned Projects — Saginaw-Michigan

	Project	SF/ Count	Status	Estimated Cost
Active Minor Construction <sup>1</sup>	Build Outpatient Physical Therapy Building (655-501)	18,828	Design Awarded 12/17/18	\$9,800,000
	Expand Medical Center Site (655-401)	5,000	Design Awarded 09/05/18	\$9,900,000
Active NRMs <sup>1</sup>	Building 1 Sprinkler Replacement (23NR6LA28) (655-14-110)	10,000	Design Awarded 11/28/14	\$2,693,082
	Building 22 Sprinkler Replacement (23NR6LA32) (655-16-105)		Design Awarded 09/21/16	\$1,600,000
	Domestic Water Monitoring (655-18-101)		Construction Awarded 09/21/18	\$304,633
	Electrical Deficiencies and Improvements (23NR6LA26) (655-13-102)		Design Awarded 09/30/13	\$990,000
	IT Hub Centralization & Infrastructure Improvements (23NR6LA25) (655-12-110)	60,000	Construction Awarded 11/08/16	\$4,319,772
	Medical Center Security and Controls Upgrades (23NR5LA11) (655-15-108)	20,000	Design Awarded 09/22/15	\$3,292,386
	Nurse Call System (23NR7KA16) (655-13-113)		Construction Awarded 04/28/17	\$2,875,000
	Nutrition & Food Service Renovation (655-20-103)	10,000	Planned	\$3,530,000
	Pave Parking Lot (23NR5LA18) (655-10-106)	63,390	Construction Awarded 05/13/15	\$5,246,000
	Pharmacy Renovation (23NR9KA21) (655-19-103)		Planned	\$4,533,391
	Pneumatic Controls Upgrade (655-17-502)		Construction Awarded 09/26/18	\$830,000
	Power Survey and Corrections (655-16-106)		Design Awarded 06/22/17	\$360,000
	Privacy Locks (655-19-201)		Planned	\$84,236
	Renovate 3rd Floor Building 1 (23NR6LA24) (655-16-101)	14,500	Design Awarded 04/25/18	\$6,225,000
	Renovate 5th Floor Building 1 (23NR8KA04) (655-16-109)		Design Awarded 02/26/18	\$4,650,000
	Renovate Building 1 Basement and Building 9 (23NR9KA10) (655-19-102)	26,000	Planned	\$4,700,000
	Renovate CLC Building 22 (655-20-102)		Planned	\$7,130,000
	Renovate First Floor Building One (Patient Aligned Care Teams) (23NR6LA36) (655-14-101)	2,246	Construction Awarded 12/23/16	\$7,700,000
	Renovate Restrooms and Domestic Water Building 1 (23NR9KA09) (655-19-101)		Design Awarded 07/10/19	\$4,480,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

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## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Facilities ► Active and Planned Projects — Saginaw-Michigan, cont.

	Project	SF/ Count	Status	Estimated Cost
Active NRMs <sup>1</sup>  Active Projects Total Estimated Cost (Major, Minor, NRM) <sup>1</sup> Minor Leases in Procurement SCIP FY2020 Submitted Projects (10-Year-Plan)	Repair Gas Line (655-19-202)		Planned	\$78,186
	Replace Elevators Buildings 1 and 22 (23NR6LA33) (655-16-110)		Design Awarded 03/28/18	\$4,400,000
	Site Prep for New Dornier Uroscopy for Surgery (655-CSI-101)	420	Construction Awarded 03/27/19	\$99,693
	SPS and Logistics Storage Renovation Building 1 (23NR5LA31) (655-13-103)		Construction Awarded 09/22/15	\$999,000
	Active Projects Total Estimated Cost (Major, Minor, NRM)			\$90,820,379
	Saginaw Clinical (Proposed New)	18,000	Proposed New (CAI)	\$450,000
	Minor Construction	3		\$33,900,000
	Minor Leases	2		\$3,325,000
	NRM-Infrastructure Modernization	5		\$18,200,000
	NRM-Sustainment	8		\$35,360,000
	Total Estimated Cost SCIP Projects	18		\$90,785,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

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## Mission



## VISN 10: Eastern Michigan Market — Detroit-Michigan

**Mission** ► **Medical Education/Training – Detroit-Michigan**

Sponsoring Facility	Program Type	Specialty	AY 2019 Training Positions (FTEs)*
Beaumont Health Detroit Medical Center Corporation	GME	Orthopaedic surgery	2.0
	GME	Anesthesiology	3.0
	GME	Cardiovascular disease	4.0
	GME	Chief Resident (IM - Quality and Patient Safety)	1.0
	GME	Chief Resident (IM)	1.0
	GME	Chief Resident (Psychiatry - Quality and Patient Safety)	0.0
	Dental	Dentistry - Oral and Maxillofacial Surgery	1.0
	GME	Emergency medicine	2.0
	GME	Endocrinology, diabetes, and metabolism	1.0
	GME	Family medicine	0.0
	GME	Gastroenterology	3.0
	GME	Geriatric medicine	1.0
	GME	Geriatric psychiatry	1.0
	GME	Hematology and Oncology	0.9
	GME	Hospice and palliative medicine (multidisciplinary)	1.0
	GME	Infectious Disease	1.5
	GME	Internal medicine	15.8
	GME	Nephrology	2.0
	GME	Neurology	2.0

\*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

Source: Facility Summary Report provided by Office of Academic Affiliation

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## VISN 10: Eastern Michigan Market — Detroit-Michigan

**Mission** ► **Medical Education/Training – Detroit-Michigan, cont.**

Sponsoring Facility	Program Type	Specialty	AY 2019 Training Positions (FTEs)*
Detroit Medical Center Corporation	GME	Obstetrics and gynecology	0.3
	GME	Ophthalmology	4.0
	GME	Pathology-Anatomic and Clinical	0.4
	GME	Physical medicine and rehabilitation	1.0
	GME	Plastic surgery	1.5
	GME	Psychiatry	13.9
	GME	Pulmonary disease and critical care medicine	4.0
	GME	Radiation oncology	1.0
	GME	Radiology-diagnostic	2.0
	GME	Rheumatology	1.0
	GME	Sleep Medicine	3.0
	GME	Surgery-general	7.0
Detroit VAMC	Dental	Dentistry - General Practice Residency 12 Months	4.0
	Dental	Dentistry - Prosthodontics	4.0
Detroit Wayne County Health Authority GME	VACAA	Family medicine	1.0
	VACAA	Internal medicine	6.5
Oakwood Hospital	GME	Orthopaedic surgery	0.0
St Joseph Mercy-Oakland	GME	Internal medicine	0.0
	VACAA	Internal medicine	0.0

\*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

Source: Facility Summary Report provided by Office of Academic Affiliation

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Sponsoring Facility	Program Type	Specialty	AY 2019 Training Positions (FTEs)*
Wayne State University School of Medicine	GME	Dermatology	6.0
	GME	Otolaryngology	2.0
	GME	Physical medicine and rehabilitation	1.0
	GME	Transitional year	1.3
	GME	Urology	2.0
Other Training Programs	Associated Health	Audiology Doctoral Extern (4th Year)	0.0
	Associated Health	Audiology Doctoral Trainee (Clin. Rotation)	0.0
	Nursing	Nursing - Clinical Nurse Specialist	4.0
	Nursing	Nursing - Nurse Practitioner	4.0
	Associated Health	Optometry Resident	2.0
	Associated Health	Pharmacy Resident	0.0
	Associated Health	Psychology	12.0
	Associated Health	Social Work	4.0

\*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

**Source: Facility Summary Report provided by Office of Academic Affiliation**

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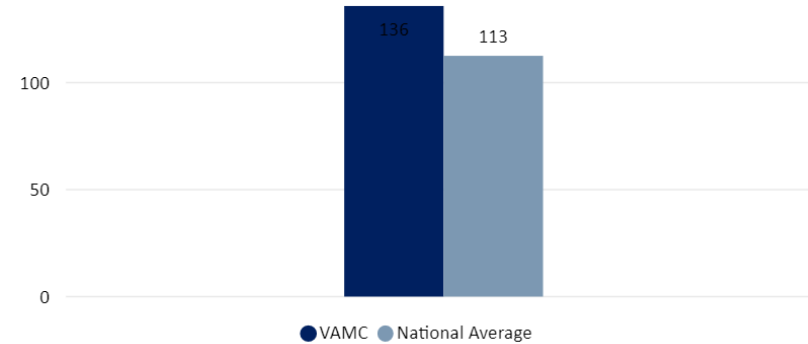
## VISN 10: Eastern Michigan Market — Detroit-Michigan

# Mission

## Medical Education/Training – Detroit-Michigan, cont.

Total VAMC Budget and FTE by Program Type		
Program Type	Budget	AY 2019 Training Positions (FTEs)*
Associated Health	\$685,007	18.0
Dental	\$467,656	9.0
GME	\$6,021,477	93.4
Nursing	\$23,088	8.0
VACAA	\$193,513	7.5
<b>Total</b>	<b>\$7,390,741</b>	<b>135.9</b>

Number of Training Positions: VAMC vs National Average



Rank: 58 out of 157 training sites (ranked by number of positions)

\* Base Positions = Training Positions

- GME = Graduate Medical Education
- VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).



## VISN 10: Eastern Michigan Market — Detroit-Michigan

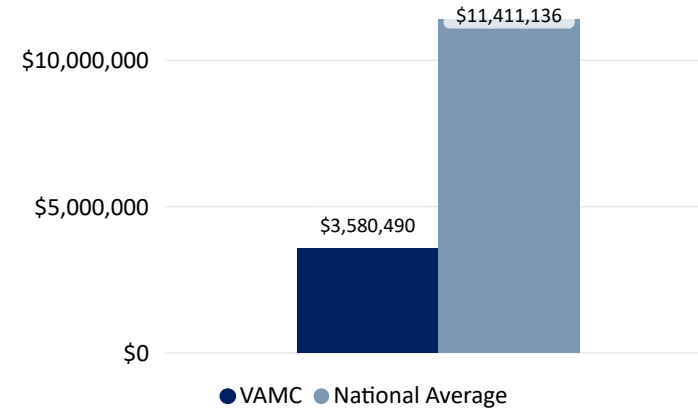
## Mission ► Research – Detroit-Michigan

VERA Allocation		
Medical Center	% National 2019 VERA Allocation	Total Research VERA Allocation
(V10) (553) Detroit-Michigan	0.3%	\$3,580,490
National Total	100.0%	\$1,067,382,760

Research dollars for the Quality Enhancement Research Initiative (QUERI) are included in the formula for allocating research support dollars.

Total VAMC Supported Research Projects		
Funding Group	Number of Projects	Reported Cost FY17
Department of Veterans Affairs (VACO)	22	\$3,352,796
National Institutes of Health (NIH)	4	\$184,819
Academic Institution, Donor, or Government	3	\$37,950
Private Proprietary Company	2	\$4,925
<b>TOTAL</b>	<b>31</b>	<b>\$3,580,490</b>

2019 VERA Allocation vs Average National Allocation\*



Rank: **57** out of 96 research sites (ranked by total funding)

\*96 VAMCs received VERA Allocation for FY19



## VISN 10: Eastern Michigan Market — Detroit-Michigan

## Mission ► Research – Detroit-Michigan, cont.

Top 5 Projects by Funding \$	
Project Name	FY17 Actual Funding <sup>1</sup>
Longitudinal Assessment of Cortical Hypoactivity in a Model of Co-morbid TBI-PTSD (traumatic brain injury-posttraumatic stress disorder) VAMC	\$411,620
Pathogenesis of Sleep Disordered Breathing in Spinal Cord Injury Patients (VAMC)	\$306,779
Role of TPH2 and 5HT Neuronal Loss in Non-motor Symptoms of Parkinson's (VAMC)	\$276,462
CARP-1: A Potential Therapeutic Agent for Breast Cancer	\$272,503
Reducing Brain Hyperglycolysis: A Novel Strategy for Hyperglycemia after Stroke	\$236,915

Top 5 VACO-Funded Projects by \$	
Project Title	FY17 Actual Funding <sup>1</sup>
Longitudinal Assessment of Cortical Hypoactivity in a Model of Co-morbid TBI-PTSD (traumatic brain injury-posttraumatic stress disorder) VAMC	\$411,620
Pathogenesis of Sleep Disordered Breathing in Spinal Cord Injury Patients (VAMC)	\$306,779
Role of TPH2 and 5HT Neuronal Loss in Non-motor Symptoms of Parkinson's (VAMC)	\$276,462
CARP-1: A Potential Therapeutic Agent for Breast Cancer	\$272,503
Reducing Brain Hyperglycolysis: A Novel Strategy for Hyperglycemia after Stroke	\$236,915

1. The project's actual (non-discounted) grant dollars.

Source: FY17 Research Submissions by VISN and Facility

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## VISN 10: Eastern Michigan Market — Saginaw-Michigan

**Mission** ► **Medical Education/Training – Saginaw-Michigan**

Sponsoring Facility	Program Type		Specialty	AY 2019 Training Positions (FTEs)*
Central Michigan University College of Medicine	GME		Internal medicine	3.0
	VACAA		Internal medicine	1.0
	VACAA		Psychiatry	1.0
	GME		Psychiatry	1.0
Other Training Programs	Associated Health		Audiology Doctoral Extern (4th Year)	1.0
	Associated Health		Pharmacy Resident	2.0
	Associated Health		Psychology	3.0
	Associated Health		Social Work	1.0

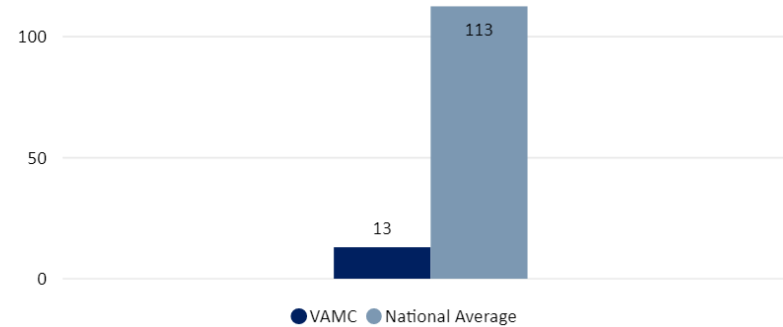


## VISN 10: Eastern Michigan Market — Saginaw-Michigan

**Mission** ► **Medical Education/Training – Saginaw-Michigan, cont.**

Total VAMC Budget and FTE by Program Type		
Program Type	Budget	AY 2019 Training Positions (FTEs)*
Associated Health	\$203,224	7.0
GME	\$342,833	4.0
VACAA	\$171,416	2.0
<b>Total</b>	<b>\$717,473</b>	<b>13.0</b>

Number of Training Positions: VAMC vs National Average



Rank: 131 out of 157 training sites (ranked by number of positions)

\* Base Positions = Training Positions

- GME = Graduate Medical Education
- VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).



Cost



## VISN 10: Eastern Michigan Market

## Cost Conceptual Cost Analysis for Inpatient Services – Methodology Overview

- The top VAMC inpatient Diagnostic Related Groups (DRGs)<sup>1</sup> by 2018 Veteran demand (discharges) with costs were identified.
  - ✓ VA costs are taken at face value and cost allocations have not been validated.
- For the top VA DRGs, the VA Average Adjusted Total Cost per discharge<sup>1</sup> was compared to the average Medicare reimbursement per discharge and Community Care purchase cost per discharge.
  - ✓ Medicare reimbursement includes Part A hospital plus estimated Part B professional (physician) costs, calculated using a proxy 40% of the Part A costs (note: typically, Part B is based on procedures that vary by type of service and discharge).<sup>2</sup>
  - ✓ An additional 15% was included as a proxy for Third Party Administration (TPA) costs borne on the VA for processing and administering each commercial inpatient stay.<sup>3</sup>
  - ✓ For each DRG, as applicable and available, Community Care<sup>4</sup> data was used to compare cost-to-purchase for Veterans assigned to the treating facility.
- As an additional comparison, the top Community Care<sup>4</sup> purchased DRGs by volume and the cost to purchase that care are included in the bottom table.

**Note:** This analysis is conceptual in nature comparing internal VA cost to provide care to Veterans to potential cost to acquire the same care in the market at Medicare rates as well as to existing experience with purchase of Non-VA care, as applicable. It is meant to provide an additional input for the market assessments and will not be used to make any specific recommendations. Given the high-level nature of this assessment, further cost benefit analysis (as defined by the MISSION Act) is necessary to better understand the comparability of VA internal cost to provide care to Veterans compared to rates to acquire the care in the community.

Sources: 1. MCAO Discharge National Data Extract, adjusted by netting out Fixed Indirect overhead as calculated by MCAO 2. 2018 CMS Medicare Standard Analytical Files (SAF) from Definitive Healthcare limited by a 50 mile radius from the parent facility 3. Based on JAMA study 'Administrative Costs Associated With Physician Billing and Insurance-Related Activities at an Academic Health Care System,' February 20, 2018 4. Office of Community Care





## VISN 10: Eastern Michigan Market — Detroit-Michigan

# Cost Conceptual Cost Analysis for Inpatient Services – Detroit-Michigan

VA Cost and Cost Comparisons by DRG – Detroit VAMC					
Top VA DRGs by Total Discharges FY2018 <sup>1</sup>	Total VA Discharges <sup>1</sup>	Average VA Total Cost per Case <sup>1</sup>	Estimated Cost to Purchase <sup>2,4</sup>	Total Community Care Discharges <sup>3</sup>	Average Payment per Case <sup>3</sup>
(885) PSYCHOSES	293	\$19,025	\$14,445	10	\$7,701
(897) ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC	165	\$13,760	\$8,087	12	\$6,174
(470) MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	162	\$24,846	\$21,141	N/A	N/A
(392) ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC	112	\$7,499	\$7,810	5	\$7,302
(189) PULMONARY EDEMA & RESPIRATORY FAILURE	92	\$20,375	\$14,347	5	\$10,896
(292) HEART FAILURE & SHOCK W/CC	87	\$14,332	\$11,125	N/A	N/A
(603) CELLULITIS W/O MCC	79	\$9,049	\$8,773	N/A	N/A
(313) CHEST PAIN	73	\$7,462	\$6,456	4	\$6,094
(683) RENAL FAILURE W/CC	60	\$12,402	\$10,087	N/A	N/A
(312) SYNCOPE & COLLAPSE	59	\$9,219	\$8,023	4	\$6,159
Remaining DRGs	2,943	\$18,927			

Community Care Costs by DRG			In-House vs Community Care	Total Discharges	Total Cost
Top Community Care DRGs by Total Discharges FY2018 <sup>3</sup>	Total Community Care Discharges <sup>3</sup>	Average Payment per Case <sup>3</sup>	In-House Inpatient Cost <sup>1</sup>	4,125	\$74,081,315
(247) PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC	47	\$18,193	Community Care <sup>3</sup>	685	\$13,368,233
(280) ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W MCC	21	\$15,723			
(871) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	20	\$13,152			
(281) ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W/CC	17	\$9,508			
(291) HEART FAILURE & SHOCK W MCC OR PERIPHERAL EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO)	16	\$11,891			
(215) OTHER HEART ASSIST SYSTEM IMPLANT	15	\$116,291			
(287) CIRCULATORY DISORDER EXCEPT AMI, W CARD CATH W/O MCC	14	\$10,836			
(897) ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC	12	\$6,174			
(176) PULMONARY EMBOLISM W/O MCC	12	\$7,259			
(190) CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	12	\$7,869			
Remaining DRGs	499	\$19,773			

\*Comparing FY2018 VA Average Adjusted Total Cost per Discharge against the CMS average payment/claim per discharge for CY2018. Proxy of 40% of Part A costs to estimate potential Medicare Part B costs plus a proxy of 15% for TPA costs. DRGs with a high Average VA Total Cost potentially tied to low volume and high LOS. Estimated cost to purchase = estimated total cost based on Medicare rates (Part A + Part B) plus a proxy of TPA costs. Medicare claim payments not available for claims/procedures with 10 or fewer discharges due to CMS privacy requirements.

Sources: 1. MCAO Discharge National Data Extract, adjusted by netting out Fixed Indirect overhead as calculated by MCAO 2. 2018 CMS Medicare Standard Analytical Files (SAF) from Definitive Healthcare limited by a 50 mile radius from the parent facility 3. Office of Community Care (Community Care DRGs with 3 or fewer discharges were not included in the VA Cost and Cost Comparison by DRG table)



## VISN 10: Eastern Michigan Market — Saginaw-Michigan

## Cost



## Conceptual Cost Analysis for Inpatient Services – Saginaw-Michigan

VA Cost and Cost Comparisons by DRG – Saginaw VAMC					
Top VA DRGs by Total Discharges FY2018 <sup>1</sup>	Total VA Discharges <sup>1</sup>	Average VA Total Cost per Case <sup>1</sup>	Estimated Cost to Purchase <sup>2,4</sup>	Total Community Care Discharges <sup>3</sup>	Average Payment per Case <sup>3</sup>
(057) DEGENERATIVE NERVOUS SYSTEM DISORDERS W/O MCC	83	\$16,271	\$27,620	N/A	N/A
(945) REHABILITATION W CC/MCC	75	\$33,395	N/A	N/A	N/A
(897) ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC	75	\$17,877	\$8,036	4	\$5,318
(192) CHRONIC OBSTRUCTIVE PULMONARY DISEASE W/O CC/MCC	30	\$18,798	\$6,973	N/A	N/A
(948) SIGNS & SYMPTOMS W/O MCC	29	\$21,016	\$14,707	N/A	N/A
(561) AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W/O CC/MCC	26	\$27,943	\$24,887	N/A	N/A
(603) CELLULITIS W/O MCC	26	\$27,331	\$8,490	11	\$6,267
(884) ORGANIC DISTURBANCES & INTELLECTUAL DISABILITY	25	\$14,514	\$16,889	4	\$9,824
(946) REHABILITATION W/OCC/MCC	23	\$20,541	N/A	N/A	N/A
(194) SIMPLE PNEUMONIA & PLEURISY W CC	22	\$15,146	\$9,860	6	\$6,532
Remaining DRGs	439	\$29,316			
Community Care Costs by DRG			In-House vs Community Care	Total Discharges	Total Cost
Top Community Care DRGs by Total Discharges FY2018 <sup>3</sup>	Total Community Care Discharges <sup>3</sup>	Average Payment per Case <sup>3</sup>	In-House Inpatient Cost <sup>4</sup>	853	\$21,844,821
(871) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	73	\$12,866	Community Care <sup>5</sup>	1,252	\$18,500,291
(470) MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	51	\$14,805			
(885) PSYCHOSES	46	\$8,403			
(291) HEART FAILURE & SHOCK W MCC OR PERIPHERAL EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO)	43	\$10,242			
(247) PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC	25	\$14,646			
(189) PULMONARY EDEMA & RESPIRATORY FAILURE	23	\$9,109			
(190) CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	20	\$8,287			
(287) CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC	20	\$8,317			
(065) INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC OR TPA IN 24 HRS	18	\$7,210			
(872) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W/O MCC	18	\$7,274			
(193) SIMPLE PNEUMONIA & PLEURISY W MCC	18	\$9,723			
Remaining DRGs	897	\$16,367			

\*Comparing FY2018 VA Average Adjusted Total Cost per Discharge against the CMS average payment/claim per discharge for CY2018. Proxy of 40% of Part A costs to estimate potential Medicare Part B costs plus a proxy of 15% for TPA costs. DRGs with a high Average VA Total Cost potentially tied to low volume and high LOS. Estimated cost to purchase = estimated total cost based on Medicare rates (Part A + Part B) plus a proxy of TPA costs. Medicare claim payments not available for claims/procedures with 10 or fewer discharges due to CMS privacy requirements.

Sources: 1. MCAO Discharge National Data Extract, adjusted by netting out Fixed Indirect overhead as calculated by MCAO 2. 2018 CMS Medicare Standard Analytical Files (SAF) from Definitive Healthcare limited by a 50 mile radius from the parent facility 3. Office of Community Care (Community Care DRGs with 3 or fewer discharges were not included in the VA Cost and Cost Comparison by DRG table)



**MAHSO**  
MARKET AREA HEALTH SYSTEMS OPTIMIZATION

# Post-DD&F Data Addendum

# Data Compendium - General Information

## Purpose

The Data Discovery and Findings (DD&F) data books prepared for each market presented a standardized collection of data used across markets to understand important aspects of each market. Because of the passage of time since the original market assessment phases were conducted, VA has developed an appendix to the DD&F to capture more recent data for key data points. Because the COVID-19 pandemic impacted 2020 and 2021 data, 2019 was the latest fiscal year incorporated for most data elements.

## Contents

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## Additional Information

The Footnotes page provides additional details about tables and individual data elements when required.

The Sources page provides the relevant data cube or program office sourcing information for each of the data elements.

# Projected Veteran Enrollee and Eligible Population (Market)

Market	Group	FY19	FY29	10 Year % Growth
(V10) Eastern Michigan	Eligible Veterans	190,872	133,194	-30.2%
	Enrollees	112,135	102,309	-8.8%

# Market Population Rank (out of 95 markets)

Market	Total Enrollee Rank FY19	Total Enrollee Rank FY29	% Change Rank
(V10) Eastern Michigan	35	36	66

# County-Based Enrollee Projections

Market	Sector	County	FY19 Enrollees	FY29 Enrollees	10 Year % Change
(V10) Eastern Michigan	10-j-1-A	(26001) Alcona, MI	621	597	-3.9%
		(26007) Alpena, MI	1,299	1,156	-11.0%
		(26069) Iosco, MI	1,394	1,322	-5.2%
		(26135) Oscoda, MI	349	322	-7.8%
		(26141) Presque Isle, MI	696	670	-3.7%
	10-j-1-B	(26035) Clare, MI	1,429	1,357	-5.0%
		(26051) Gladwin, MI	1,113	1,071	-3.7%
		(26073) Isabella, MI	1,194	1,116	-6.5%
		(26143) Roscommon, MI	1,249	1,184	-5.2%
	10-j-1-C	(26011) Arenac, MI	624	582	-6.7%
		(26017) Bay, MI	3,252	2,987	-8.1%
		(26111) Midland, MI	2,281	2,204	-3.4%
		(26129) Ogemaw, MI	878	828	-5.7%
	10-j-1-D	(26063) Huron, MI	1,049	974	-7.1%
		(26145) Saginaw, MI	5,714	5,108	-10.6%
		(26157) Tuscola, MI	1,821	1,690	-7.2%
	10-j-2-A	(26049) Genesee, MI	9,017	8,858	-1.8%
		(26087) Lapeer, MI	2,111	2,221	5.2%
		(26155) Shiawassee, MI	1,833	1,877	2.4%
	10-j-2-B	(26147) Saint Clair, MI	4,663	4,514	-3.2%
		(26151) Sanilac, MI	1,304	1,200	-8.0%
	10-j-2-C	(26125) Oakland, MI	18,082	16,407	-9.3%
	10-j-2-D	(26099) Macomb, MI	15,699	15,006	-4.4%
	10-j-2-E	(26163) Wayne, MI	34,464	29,059	-15.7%

# Projected Veteran Enrollee and Eligible Population (Demographics)

Market	Group	Measure Description	Measure Categories	FY19	FY29	10 Year % Change
(V10) Eastern Michigan	Eligible Veterans	Age	<45	32,653	22,404	-31.4%
			45-64	57,873	35,255	-39.1%
			65+ (Combination)	100,345	75,535	-24.7%
			65-84	82,016	62,417	-23.9%
			85-89	11,078	8,095	-26.9%
			90+	7,251	5,023	-30.7%
		Gender	Female	14,609	13,827	-5.4%
			Male	176,263	119,367	-32.3%
		Priority	Priority 1-6	156,083	110,872	-29.0%
			Priority 7-8	34,789	22,322	-35.8%
	Enrollees	Age	<45	19,857	16,808	-15.4%
			45-64	33,647	29,173	-13.3%
			65+ (Combination)	58,631	56,328	-3.9%
			65-84	50,565	48,416	-4.2%
			85-89	4,785	5,120	7.0%
			90+	3,281	2,792	-14.9%
		Gender	Female	7,809	9,995	28.0%
			Male	104,326	92,314	-11.5%
		Priority	Priority 1-6	89,447	85,379	-4.5%
			Priority 7-8	22,688	16,931	-25.4%



# Market Enrollment Rurality (FY19)

Market	Rural Enrollees	Total Enrollees	% Rurality
(V10) Eastern Michigan	25,662	107,734	23.8%

# County Enrollment Rurality

Market	County	Rural Enrollee	Total Enrollees	% Rurality
(V10) Eastern Michigan	Alcona, MI	627	627	100.0%
	Alpena, MI	1,222	1,222	100.0%
	Arenac, MI	510	510	100.0%
	Bay, MI	579	3,227	17.9%
	Clare, MI	1,299	1,299	100.0%
	Genesee, MI	1,198	8,418	14.2%
	Gladwin, MI	1,055	1,055	100.0%
	Huron, MI	1,013	1,013	100.0%
	Iosco, MI	1,370	1,370	100.0%
	Isabella, MI	1,301	1,301	100.0%
	Lapeer, MI	2,140	2,140	100.0%
	Macomb, MI	438	15,210	2.9%
	Midland, MI	848	2,361	35.9%
	Oakland, MI	1,230	17,265	7.1%
	Ogemaw, MI	864	864	100.0%
	Oscoda, MI	417	417	100.0%
	Presque Isle, MI	626	626	100.0%
	Roscommon, MI	1,088	1,088	100.0%
	Saginaw, MI	1,615	5,562	29.0%
	Saint Clair, MI	1,454	4,522	32.2%
	Sanilac, MI	1,199	1,240	96.7%
	Shiawassee, MI	1,775	1,775	100.0%
	Tuscola, MI	1,718	1,718	100.0%
	Wayne, MI	76	32,904	0.2%

# FY19 Market Core Uniques

Market Name	Core Uniques
(V10) Eastern Michigan	75,502

# Core Uniques

Market	Facility	FY15	FY16	FY17	FY18	FY19	5 Year % Change
(V10) Eastern Michigan	(V10) (506GB) Flint VA Clinic	3,238	3,493	3,785	3,852	4,084	26.1%
	(V10) (553) John D. Dingell Department of Veterans Affairs Medical Center	47,144	49,295	47,574	47,598	45,712	-3.0%
	(V10) (553BU) Detroit DCHV	129	199	226	210	204	58.1%
	(V10) (553GA) Yale VA Clinic	4,309	4,350	4,412	4,443	4,345	0.8%
	(V10) (553GB) Pontiac VA Clinic	3,639	3,834	3,801	3,938	3,717	2.1%
	(V10) (553QA) Piquette Street VA Clinic			882	1,270	1,342	
	(V10) (655) Aleda E. Lutz Department of Veterans Affairs Medical Center	29,705	30,236	30,361	30,092	31,092	4.7%
	(V10) (655GC) Oscoda VA Clinic	1,812	1,737	1,773	1,767	1,780	-1.8%
	(V10) (655GD) Lieutenant Colonel Clement C. Van Wagoner Department of Veterans Affairs Clinic	1,945	2,331	2,934	3,079	2,825	45.2%
	(V10) (655GE) Clare VA Clinic	4,047	4,081	4,200	4,275	4,247	4.9%
	(V10) (655GF) Bad Axe VA Clinic	1,143	1,306	1,377	1,867	2,271	98.7%
	(V10) (655QA) Saginaw VA Clinic			3,807	5,099	4,861	

# Emergency Department (ED) Encounters

Market	Facility	Measure	FY17	FY18	FY19	3 Year % Change
(V10) Eastern Michigan	(V10) (553) Detroit-Michigan	99281	2,782	917	206	-92.6%
		99282	8,274	5,083	4,410	-46.7%
		99283	7,408	7,150	7,397	-0.1%
		99284	3,721	4,736	6,318	69.8%
		99285	619	3,956	3,689	496.0%
		Total Encounters	22,804	21,842	22,020	-3.4%

# ED % Transfers & Admissions

Market Description	Facility	Measure	FY17	FY18	FY19
(V10) Eastern Michigan	(V10) (553) Detroit-Michigan	% Transfers	1.2%	1.7%	1.0%
		VA Admission %	15.5%	14.8%	16.5%

# Urgent Care Encounters

Market	Facility	FY17	FY18	FY19	3 Year % Change
(V10) Eastern Michigan	(V10) (655) Saginaw-Michigan	11,210	9,537	9,384	-16.3%

# Outpatient Encounters (FY17-19)

Market	Facility	Clinic Grouping	FY17	FY18	FY19	3 Year % Change
(V10) Eastern Michigan	(V10) (506GB) Flint	Mental Health	7,474	7,436	6,937	-7.2%
		Primary Care	10,375	11,743	12,000	15.7%
		Specialty Care	1,176	1,117	1,447	23.0%
	(V10) (553) Detroit-Michigan	Mental Health	107,597	118,308	118,082	9.7%
		Primary Care	81,457	94,352	92,523	13.6%
		Specialty Care	436,671	447,510	457,531	4.8%
	(V10) (553BU) Detroit Domiciliary	Mental Health	3,292	3,569	6,840	107.8%
	(V10) (553GA) Yale	Mental Health	1,045	808	873	-16.5%
		Primary Care	14,484	14,139	14,695	1.5%
		Specialty Care	1,377	2,261	1,904	38.3%
	(V10) (553GB) Pontiac	Mental Health	1,181	1,107	862	-27.0%
		Primary Care	8,650	9,941	9,088	5.1%
		Specialty Care	5,660	5,301	4,608	-18.6%
	(V10) (553QA) Piquette Street	Mental Health	3,890	6,631	6,162	58.4%
		Primary Care	644	987	1,179	83.1%
	(V10) (655) Saginaw-Michigan	Mental Health	21,388	4,029	4,473	-79.1%
		Primary Care	54,128	58,080	61,445	13.5%
		Specialty Care	250,444	256,298	270,521	8.0%
	(V10) (655GC) Oscoda	Mental Health	1,808	1,378	1,393	-23.0%
		Primary Care	4,979	4,644	5,023	0.9%
		Specialty Care	2,026	3,098	3,236	59.7%
	(V10) (655GD) Alpena	Mental Health	2,422	2,423	2,246	-7.3%
		Primary Care	6,475	6,693	6,526	0.8%
		Specialty Care	6,293	7,631	7,018	11.5%
	(V10) (655GE) Clare	Mental Health	4,272	4,116	3,912	-8.4%
		Primary Care	11,828	11,953	13,019	10.1%
		Specialty Care	5,165	7,548	8,190	58.6%
	(V10) (655GF) Bad Axe	Mental Health	1,958	2,240	2,006	2.5%
		Primary Care	3,246	4,027	4,037	24.4%
		Specialty Care	2,953	3,521	3,996	35.3%
	(V10) (655QA) Saginaw-Barnard Road	Mental Health	24,847	40,349	39,676	59.7%
		Primary Care	0	0	13	



# Outpatient Encounters (FY17-19)

Market	Facility	Clinic Grouping	FY17	FY18	FY19	3 Year % Change
(V10) Eastern Michigan	(V10) (655QA) Saginaw-Barnard Road	Specialty Care	456	674	724	58.8%

# Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) Eastern Michigan	(V10) (506GB) Flint VA Clinic	Cardiology	10	30	10	0.0%
		Dermatology	193	213	221	14.5%
		Gastroenterology	66	44	28	-57.6%
		Nutrition	208	119	226	8.7%
		Optometry	114	170	142	24.6%
		Physical Medicine & Rehabilitation	567	480	613	8.1%
		Prosthetics/Orthotics	0	53	183	
		Urology	18	8	24	33.3%
	(V10) (553) John D. Dingell Department of Veterans Affairs Medical Center	Allergy and Immunology	1,137	1,105	957	-15.8%
		Anesthesiology	1,131	1,178	1,152	1.9%
		Audiology / Speech Pathology	9,599	9,795	10,025	4.4%
		Blind Rehabilitation	971	839	926	-4.6%
		Cardiology	21,459	22,209	23,523	9.6%
		Critical Care / Pulmonary Disease	15,263	18,236	17,860	17.0%
		Dermatology	17,121	17,610	16,887	-1.4%
		Emergency Medicine	22,599	22,557	22,579	-0.1%
		Endocrinology	2,911	3,138	3,446	18.4%
		Gastroenterology	6,081	5,597	5,520	-9.2%
		Geriatric Medicine	8,216	7,898	7,105	-13.5%
		Hematology-Oncology	8,789	8,574	9,609	9.3%
		Infectious Disease	1,587	782	745	-53.1%
		Nephrology	15,269	16,082	15,442	1.1%
		Neurology	4,968	5,882	5,890	18.6%
		Nutrition	893	898	1,071	19.9%
		Obstetrics & Gynecology	779	701	762	-2.2%
		Occupational Health	704	760	758	7.7%
		Ophthalmology	10,632	11,706	12,068	13.5%
		Optometry	17,980	21,380	22,945	27.6%

# Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) Eastern Michigan	(V10) (553) John D. Dingell Department of Veterans Affairs Medical Center	Orthopaedic Surgery	7,970	7,663	8,080	1.4%
		Otolaryngology	4,268	4,131	4,628	8.4%
		Pain Medicine	9,443	10,225	6,311	-33.2%
		Pathology	139,731	139,140	144,304	3.3%
		Pharmacy	10,516	11,538	13,082	24.4%
		Physical Medicine & Rehabilitation	17,430	16,677	17,720	1.7%
		Plastic Surgery	2,452	2,153	2,212	-9.8%
		Podiatry	4,657	4,163	4,526	-2.8%
		Prosthetics/Orthotics	6,492	7,584	7,360	13.4%
		Radiology	46,275	45,860	46,027	-0.5%
		Rheumatology	2,762	3,243	3,494	26.5%
		Sleep Medicine	0	0	1,405	
		Surgery	8,659	9,403	9,414	8.7%
		Thoracic Surgery	293	246	304	3.8%
		Urology	3,857	4,905	5,497	42.5%
		Vascular Surgery	3,777	3,652	3,897	3.2%
	(V10) (553GA) Yale VA Clinic	Dermatology	9	86	108	1100.0%
		Optometry	102	520	302	196.1%
		Pharmacy	1,083	1,402	1,209	11.6%
		Physical Medicine & Rehabilitation	0	0	56	
		Prosthetics/Orthotics	183	253	229	25.1%
	(V10) (553GB) Pontiac VA Clinic	Audiology / Speech Pathology	1,951	1,935	1,823	-6.6%
		Critical Care / Pulmonary Disease	30	53	49	63.3%
		Dermatology	113	53	63	-44.2%
		Optometry	241	179	135	-44.0%
		Physical Medicine & Rehabilitation	3,325	3,081	2,538	-23.7%
	(V10) (655) Aleda E. Lutz Department of Veterans Affairs Medical Center	Anesthesiology	1,369	1,525	1,804	31.8%
		Audiology / Speech Pathology	10,640	11,545	12,054	13.3%

# Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) Eastern Michigan	(V10) (655) Aleda E. Lutz Department of Veterans Affairs Medical Center	Blind Rehabilitation	142	153	121	-14.8%
		Cardiology	4,705	5,638	14,103	199.7%
		Critical Care / Pulmonary Disease	9,156	8,278	8,439	-7.8%
		Dermatology	524	545	541	3.2%
		Emergency Medicine	11,236	9,563	9,384	-16.5%
		Endocrinology	521	374	379	-27.3%
		Gastroenterology	816	23	26	-96.8%
		Geriatric Medicine	5,858	5,266	5,292	-9.7%
		Infectious Disease	1,033	802	636	-38.4%
		Nephrology	1,180	136	0	-100.0%
		Neurological Surgery	16	10	10	-37.5%
		Neurology	2,022	2,612	1,848	-8.6%
		Nutrition	1,621	1,277	1,231	-24.1%
		Obstetrics & Gynecology	83	352	452	444.6%
		Occupational Health	152	187	190	25.0%
		Optometry	19,078	22,018	22,457	17.7%
		Pain Medicine	1,311	1,038	1,279	-2.4%
		Pathology	100,768	102,072	104,766	4.0%
		Pharmacy	7,601	6,701	7,500	-1.3%
		Physical Medicine & Rehabilitation	29,200	31,641	31,320	7.3%
		Podiatry	7,976	9,722	10,425	30.7%
		Prosthetics/Orthotics	4,047	3,879	3,483	-13.9%
		Radiology	20,472	21,260	21,122	3.2%
		Rheumatology	14	18	19	35.7%
		Sleep Medicine	0	0	645	
		Surgery	5,845	7,891	8,836	51.2%
		Urology	3,058	1,772	2,159	-29.4%
	(V10) (655GC) Oscoda VA Clinic	Audiology / Speech Pathology	77	77	66	-14.3%
		Cardiology	23	30	233	913.0%

# Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) Eastern Michigan	(V10) (655GC) Oscoda VA Clinic	Critical Care / Pulmonary Disease	144	177	248	72.2%
		Dermatology	73	109	108	47.9%
		Endocrinology	26	11	9	-65.4%
		Geriatric Medicine	480	1,111	1,025	113.5%
		Infectious Disease	17	12	7	-58.8%
		Nutrition	38	38	18	-52.6%
		Optometry	11	49	64	481.8%
		Pharmacy	100	147	138	38.0%
		Physical Medicine & Rehabilitation	53	123	108	103.8%
		Podiatry	669	861	823	23.0%
		Prosthetics/Orthotics	299	339	367	22.7%
		Surgery	16	14	22	37.5%
	(V10) (655GD) Lieutenant Colonel Clement C. Van Wagoner Department of Veterans Affairs Clinic	Audiology / Speech Pathology	118	141	187	58.5%
		Cardiology	15	57	451	2906.7%
		Critical Care / Pulmonary Disease	185	216	249	34.6%
		Dermatology	92	132	127	38.0%
		Geriatric Medicine	1,330	1,878	1,758	32.2%
		Nutrition	163	113	80	-50.9%
		Optometry	8	63	57	612.5%
		Pharmacy	147	147	163	10.9%
		Physical Medicine & Rehabilitation	2,099	2,373	2,677	27.5%
		Podiatry	526	694	668	27.0%
		Prosthetics/Orthotics	1,557	1,778	573	-63.2%
		Surgery	53	39	28	-47.2%
	(V10) (655GE) Clare VA Clinic	Cardiology	35	58	368	951.4%
		Dermatology	126	131	235	86.5%
		Endocrinology	50	24	24	-52.0%
		Geriatric Medicine	1,723	1,504	1,653	-4.1%

# Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) Eastern Michigan	(V10) (655GE) Clare VA Clinic	Infectious Disease	13	10	12	-7.7%
		Nutrition	378	402	407	7.7%
		Optometry	22	49	69	213.6%
		Pain Medicine	0	21	24	
		Pharmacy	513	654	482	-6.0%
		Physical Medicine & Rehabilitation	1,535	3,641	3,753	144.5%
		Prosthetics/Orthotics	747	1,014	1,119	49.8%
		Surgery	23	40	44	91.3%
	(V10) (655GF) Bad Axe VA Clinic	Audiology / Speech Pathology	86	67	84	-2.3%
		Cardiology	14	36	174	1142.9%
		Dermatology	79	100	85	7.6%
		Endocrinology	28	13	10	-64.3%
		Nutrition	133	130	111	-16.5%
		Optometry	22	83	50	127.3%
		Pain Medicine	2	7	19	850.0%
		Pharmacy	141	128	142	0.7%
		Physical Medicine & Rehabilitation	2,272	2,495	3,235	42.4%
		Prosthetics/Orthotics	176	462	86	-51.1%
	(V10) (655QA) Saginaw VA Clinic	Pharmacy	214	315	277	29.4%
		Physical Medicine & Rehabilitation	242	359	447	84.7%

# Surgical Cases (FY15-19)

Market	Facility	Setting	FY15	FY16	FY17	FY18	FY19	5 Year % Change
(V10) Eastern Michigan	(V10) (553) John D. Dingell Department of Veterans Affairs Medical Center	IP Cases	1,092	1,045	1,101	1,252	1,050	-3.9%
		OP Cases	2,166	2,134	2,116	2,104	2,181	0.7%
	(V10) (655) Aleda E. Lutz Department of Veterans Affairs Medical Center	IP Cases	30	9	10	5	12	-60.9%
		OP Cases	2,020	2,233	1,484	2,082	1,608	-20.4%

# Historical VAMC ADC

Market	Facility	Bed Service	FY15	FY16	FY17	FY18	FY19	5 Year % Change
(V10) Eastern Michigan	(V10) (553) John D. Dingell Department of Veterans Affairs Medical Center	CLC	65.5	55.5	55.4	51.8	47.8	-27.0%
		Intermediate						
		Medical	35.2	34.8	28.7	28.5	32.6	-7.4%
		Mental Health	12.8	11.2	11.9	11.3	13.5	5.5%
		RRTP*	0.5	0.1				
		Surgery	10.8	9.6	10.9	9.7	7.3	-32.4%
		Total Med/Surg	46	44.4	39.6	38.2	39.9	-13.3%
		VAMC Total	124.8	111.2	106.9	101.3	101.2	-18.9%
	(V10) (553BU) Detroit DCHV	Medical		0.4	1			
		RRTP*	38.3	38.1	35.9	33.3	39.3	2.6%
		Total Med/Surg		0.4	1			
		VAMC Total	38.3	38.5	36.9	33.3	39.3	2.6%
	(V10) (655) Aleda E. Lutz Department of Veterans Affairs Medical Center	CLC	36.4	34.2	33.5	28.7	30.3	-16.8%
		Medical	3.6	3.4	3.9	2.9	2.4	-33.3%
		Total Med/Surg	3.6	3.4	3.9	2.9	2.4	-33.3%
		VAMC Total	40	37.6	37.4	31.6	32.7	-18.3%



## FY19 RRTP Beds and ADC

Market	Facility	RRTP Service	FY19 ADC	Operational Beds
(V10) Eastern Michigan	Detroit	DCHV	35.0	50

# FY19 Community Capacity

Market	Facility	Bed Section	Beds	Beds Available	% Occupancy
(V10) Eastern Michigan	Detroit	Acute	14,119	1,779	69.3%
		Nursing Home	9,821	743	83.3%
		Psych	910	115	68.7%
		Rehab	597	88	67.0%
	Saginaw	Acute	3,074	678	58.1%
		Nursing Home	1,719	194	78.8%
		Psych	258	20	73.0%
		Rehab	150	25	63.8%

# BY19 Projected Parent Facility ADC (EHCPM)

Market	Parent Facility	Bed Service	Funding Source	FY19 Actual	FY29 Projected	10 Year % Change
(V10) Eastern Michigan	Detroit, MI HCS	Acute Inpatient Med/Surg	Community	15.6	14.6	-5.9%
			In-House	39.4	28.0	-28.8%
		Acute Inpatient Medicine	Community	8.9	9.2	3.4%
			In-House	30.6	22.7	-26.1%
		Acute Inpatient Mental Health	Community	1.0	0.9	-12.4%
			In-House	14.4	8.9	-38.2%
		Acute Inpatient Surgery	Community	6.6	5.4	-18.4%
			In-House	8.7	5.4	-38.2%
		Inpatient LTSS	Community	56.2	100.1	77.9%
			In-House	49.7	63.5	27.6%
		Inpatient Residential Rehab	In-House	38.6	27.9	-27.8%
	Saginaw, MI HCS	Acute Inpatient Med/Surg	Community	22.7	26.2	15.7%
			In-House	2.0	1.6	-23.4%
		Acute Inpatient Medicine	Community	12.7	15.7	23.3%
			In-House	2.0	1.6	-23.4%
		Acute Inpatient Mental Health	Community	2.6	3.5	33.5%
			In-House	0.7	0.4	-45.7%
		Acute Inpatient Surgery	Community	9.9	10.5	6.0%
		Inpatient LTSS	Community	73.3	121.4	65.7%
			In-House	30.0	35.6	18.7%

# BY19 Projected Market ADC (EHCPM)

Market	Planning Category Group	Funding Source	FY19 ADC Actual	FY29 ADC Projected	10 Year % Change
(V10) Eastern Michigan	Acute Inpatient Med/Surg	Community	34.3	35.5	3.4%
		In-House	68.6	52.2	-24.0%
	Acute Inpatient Medicine	Community	19.3	21.5	11.4%
		In-House	51.4	40.3	-21.5%
	Acute Inpatient Mental Health	Community	4.3	4.9	14.2%
		In-House	26.6	19.7	-26.2%
	Acute Inpatient Surgery	Community	15.0	14.0	-6.8%
		In-House	17.2	11.8	-31.3%
	Inpatient Blind Rehab	Community	0.0	0.0	
		In-House	2.1	2.4	13.1%
	Inpatient LTSS	Community	119.1	201.5	69.2%
		In-House	94.2	116.3	23.4%
	Inpatient Residential Rehab	Community	0.0	0.0	
		In-House	59.1	43.5	-26.4%
	Inpatient Spinal Cord Injury	Community	0.0	0.0	
		In-House	1.4	1.3	-6.3%

# BY18 RRTP Projected Market ADC (3D Model)

Market	Market (BY18)	RRTP Bed Section	FY28 ADC	FY28 Bed Need
(V10) Eastern Michigan	10-j	All Bed Sections	52.0	61
		Dom Homeless	15.8	19
		Gen Dom	17.9	21
		PTSD	4.2	5
		Substance Abuse	14.2	17

# BY19 Projected Market RVUs (EHCPM)

Market	Planning Category Group	Funding Source	FY19 RVUs Actual	FY29 RVUs Projected	10 Year % Change
(V10) Eastern Michigan	Amb LTSS Home and Community Based	In-House	58,681	85,474	45.7%
	Amb Medical Specialties	Community	75,378	136,147	80.6%
		In-House	372,469	488,807	31.2%
	Amb Mental Health Programs	Community	7,909	17,260	118.2%
		In-House	334,622	458,869	37.1%
	Amb Pathology	Community	2,922	6,580	125.2%
		In-House	19,731	26,294	33.3%
	Amb Primary Care	Community	11,527	73,439	537.1%
		In-House	282,187	391,022	38.6%
	Amb Radiology	Community	24,089	38,555	60.0%
		In-House	107,212	140,359	30.9%
	Amb Rehab Therapies	Community	28,150	45,909	63.1%
		In-House	88,098	126,362	43.4%
	Amb Surgical Specialties	Community	48,477	92,424	90.7%
		In-House	153,902	227,349	47.7%
	Specialty Care (Amb Med/Surg/Rehab)	Community	152,005	274,480	80.6%
		In-House	614,468	842,518	37.1%

# BY19 Projected Market Dental Procedures (EHCPM)

Market	Funding Source	FY19 Procedures Actual	FY29 Procedures Projected	Projected % Change
(V10) Eastern Michigan	Community	4,207	5,509	30.9%
	In-House	61,697	81,240	31.7%

# Enrollment Proximity to Current VA Sites by Market

Market	Market (FY18)	Total Enrollees	Primary Care # of Enrollees within 30 Min Drive Time	Primary Care % of Enrollees within 30 Min Drive Time	Secondary Care # of Enrollees within 60 Min Drive Time	Secondary Care % of Enrollees within 60 Min Drive Time
(V10) Eastern Michigan	10-j	115,807	98,174	84.8%	101,806	87.9%



# Real Property Overview

Market	Facility	Acres Available	Property Size	Main Patient Care Facility Construction Date	Most Recent Renovation Date (Main Hospital Building)	Estimated Annual Operations and Maintenance Cost	FCA Cost	Seismic Risk
(V10) Eastern Michigan	Detroit	0.0	17	1996		\$14,913,968	\$107,455,351	Low Risk
	Saginaw	0.0	17	1950	1987	\$5,234,752	\$42,333,938	Low Risk

## Building FCA

Market	Station	Building No	Function Title	FCA Correction Cost
(V10) Eastern Michigan	Detroit	100	MEDICAL CENTER	\$90,351,156
		101	Parking Garage	\$6,592,192
		102	Parking Garage	\$3,184,769
		103	Energy Center	\$2,924,246
		Site	Site Utilities	\$4,402,987
	Saginaw	1	Hospital	\$24,493,202
		17	Gas Meter House	\$21,370
		18	Hazardous Waste Storage	\$15,775
		19	Emergency Generator	\$66,075
		2	Police Svcs & Quality Mgt	\$1,001,228
		20	Substation Switchgear	\$33,718
		21	Vehicle Garage	\$93,804
		22	Community Living Center	\$6,119,188
		3	Director's Suite	\$2,162,253
		30	Administration	\$65,766
		32	Pump House	\$880
		33	Water Tower	\$0
		34	Backflow Preventer Substation	\$10,282
		35	Pavilion	\$20,160
		36	Greenhouse	\$252
		37	E85 Fueling Station	\$0
		4	Healthcare Administration Services	\$1,677,006
		6	Human Resources	\$0
		9	Warehouse	\$312,443
		Site	Site Utilities	\$6,240,536

# FY20 Allocated Training Positions

Market	Facility	Training Category	Program Name	Paid	WOC	Total HPTs
(V10) Eastern Michigan	Detroit	Admin	Health Care Management	0	4	4
			Health Services Administration	0	2	2
		Anesthesiology/Surgery	Anesthesiology	0	12	12
			Obstetrics & Gynecology	0	20	20
			Ophthalmology	0	21	21
			Orthopaedic Surgery	0	7	7
			Otolaryngology-Head and Neck Surgery	0	15	15
			Plastic Surgery	0	6	6
			Surgery	0	50	50
			Urology	0	12	12
		Associated Health	Art Therapist	0	2	2
			Audiologist Student	0	7	7
			Audiology Assistant	0	1	1
			Cardiovascular Technologist	0	1	1
			Dental Hygienist	0	23	23
			Kinesiotherapist	0	2	2
			Occupational Therapist Assistant	0	2	2
			Occupational Therapist Fellow	0	2	2
			Optometrist Resident/Fellow	3	12	15
			Pharmacist Student/Extern	0	47	47
			Psychologist Intern	10	0	10
			Social Worker Student/Intern	4	5	9
			Speech-Language Pathologist Fellow	0	2	2
		Dental	Dentist, General Practice	2	0	2
			Dentist, Oral and Maxillofacial Surgery	0	6	6
		Medical	Dermatology	0	12	12
			Family Medicine	0	18	18
			Internal Medicine	0	115	115
			Internal Medicine-Cardiovascular Disease	0	12	12
			Internal Medicine-Chief Resident	0	1	1
			Internal Medicine-Chief Resident in Quality and Safety	0	1	1
			Internal Medicine-Endocrinology, Diabetes & Metabolism	0	7	7

# FY20 Allocated Training Positions

Market	Facility	Training Category	Program Name	Paid	WOC	Total HPTs
(V10) Eastern Michigan	Detroit	Medical	Internal Medicine-Gastroenterology	0	10	10
			Internal Medicine-Geriatric Medicine	0	4	4
			Internal Medicine-Hematology & Medical Oncology	0	8	8
			Internal Medicine-Hospice and Palliative Medicine	0	7	7
			Internal Medicine-Infectious Disease	0	12	12
			Internal Medicine-Nephrology	0	4	4
			Internal Medicine-Pulmonary Disease and Critical Care Medicine	0	24	24
			Internal Medicine-Rheumatology	0	8	8
			Internal Medicine-Sleep Medicine	0	6	6
			Medical Student	0	165	165
			Physical Medicine & Rehabilitation	0	8	8
			Transitional Year	0	6	6
		Nurse	APN-Anesthetist	0	37	37
			APN-Clinical Nurse Specialist	1	6	7
			Licensed Practical Nurse	0	30	30
			Nurse's Aide/Assistant	0	29	29
			Registered Nurse Student	0	85	85
			Registered Nurse-Administrative	0	4	4
			RN Doctoral (PhD-ND-DNP-DNS)	0	4	4
		Psychiatry/Neurology	Neurology	0	23	23
			Psychiatry	0	38	38
		Radiology/Pathology	Pathology-Anatomic & Clinical	0	10	10
			Radiology-Diagnostic Radiology	0	24	24
			Radiology-Radiation Oncology	0	7	7
	Saginaw	Admin	Health Informatics	0	1	1
			Health Information Management	0	1	1
			Healthcare Administration	0	1	1
		Associated Health	Audiologist Extern	1	0	1
			Dental Hygienist	0	15	15
			Occupational Therapist Student/Intern	0	2	2
			Pharmacist Student/Extern	2	4	6
			Physical Therapist Student/Intern	0	6	6

# FY20 Allocated Training Positions

Market	Facility	Training Category	Program Name	Paid	WOC	Total HPTs
(V10) Eastern Michigan	Saginaw	Associated Health	Physician Assistant Student	0	1	1
			Psychologist Intern	3	0	3
			Recreation Therapist	0	1	1
			Social Worker Student/Intern	2	0	2
		Medical	Family Medicine	0	2	2
			Internal Medicine	0	25	25
			Medical Student	0	11	11
		Nurse	APN-NP Student	0	12	12
			Registered Nurse Student	0	19	19

## Academic Ranking (by Total HPTs)

Market	Facility	Total HPTs	National Ranking (out of 154 sites)
(V10) Eastern Michigan	Detroit	1,006	50
	Saginaw	109	127

## FY21 Research Funding

Market	Medical Center	Total Funding (VA and Non-VA)	Rank
(V10) Eastern Michigan	Detroit	\$5,510,140	45

# Footnotes

## *Market Population Rank (out of 95 markets)*

Note: The VISN 02 Finger Lakes and Southern Tier markets merged in 2019 during the market assessments, changing the count of markets assessed from 96 to 95.

## *County-Based Enrollee Projections*

Note: Market totals do not exactly match the values in the Rurality tables due to a difference in data sources.

Note: Counties with fewer than 10 enrollees were reduced to 0 based on privacy guidelines.

## *Rurality*

Note: FY19 enrollees in this data differ from the values shown in the EHCPM (Projected Population). This data is sourced from the Geocoded Enrollee file.

Note: Rural enrollees include enrollees residing in rural and highly rural locations.

Note: Counties with fewer than 10 enrollees were reduced to 0 based on privacy guidelines.

## *Core Uniques*

Note: Core uniques excludes uniques who have only used telephone triage, pharmacy, and lab.

## *Historical VAMC ADC*

Note: \*RRTP includes Domiciliary and Compensated Work Therapy/Transitional Residence (CWT/TR) bed services.

## *FY19 Community Capacity*

Note: Although similar data was incorporated in the DD&F, community capacity in this compendium displays the supply of total community beds, occupancy, and beds available among community providers within 60 minutes of each VAMC or HCC. Each community hospital or nursing home which is not currently included in the Veterans Community Care Program or does not meet the minimum quality criteria established in the Section 203 Criteria analysis is excluded. Additionally, providers at or above target occupancy (80% for short-term acute care hospitals, 90% for nursing homes) are assumed to have no bed availability.

## *BY19 Projected Market RVUs (EHCPM)*

Note: Specialty Care includes Medical Specialties, Surgical Specialties, and Rehab Therapies.

## *OP Encounters & SC Encounters*

Note: The stop code mapping used in the data compendium is based on a custom stop code mapping created by VA for the market assessments. The Data Discovery and Findings (DD&F) documents used the Public Data Clinic Group stop code mapping.

## *Enrollment Proximity to Current VA Sites by Market*

Note: Primary care sites include VAMCs, HCCs, MS CBOCs, and CBOCs. Secondary care sites include VA facilities providing ambulatory surgery or acute inpatient services.

## *Real Property Overview*

Note: Acres available provides an indication of any excess or surplus land, not currently in use and has no plans for future expansion needs that could be used for future development.

## *Building FCA*

Note: Project Costs to remediate FCAs vary significantly, from below assessed value to more than 3 times the value.

## *FY20 Allocated Training Positions*

Note: This data displays the number of paid, unpaid (WOC), and total Health Profession Trainees (HPTs) at each facility by training program. This data was acquired from the Office of Academic Affiliations.



# Sources

*Facility Hierarchy*

FY21 Q4 VA Site Tracking (VAST)

*Enrollee Projections*

BY19 EHCPM

*Rurality*

Geocoded Enrollee FY19 Q4

*Core Uniques*

VSSC Uniques Cube

*ED/UCC Encounters*

VSSC Encounters Cube

*ED Transfers & Admissions*

Emergency Medicine Management Tool

*Surgical Cases*

National Surgery Office

*Outpatient Encounters*

VSSC Encounters Cube

*Historical VAMC ADC*

MCAO Discharge Cube

*Projected Demand*

BY19 EHCPM

*Projected RRTP Demand*

RRTP 3D Model

*FY19 RRTP Beds and ADC*

RRTP Program Office

*FY19 Quality Community Capacity*

2019 CMS Cost Reports

*Enrollment Proximity to Current VA Sites by Market*

FY19 Q4 Enrollment; FY19 Q4 VAST data; VHA OPP Planning Systems Support Group

*Real Property Overview*

CAI Buildings and FCA Condition Gaps Report (November 2021)

*Building FCA*

CAI Buildings and FCA Condition Gaps Report (November 2021)

*Emergency Preparedness Primary Receiving Centers*

Office of Emergency Management

*Academic Mission - Allocated Training Positions*

Office of Academic Affiliations

*Research Mission - Research Funding*

Office of Research and Development